

**LIST OF EFFECTIVE PAGES**

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Basic Instruction		2-5	1	3-26	0	3-62	0	3-96	0
1	1	2-5A	1	3-27	0	3-63	0	3-97	0
2	1	2-5B	1	3-28	0	3-64	0	3-98	0
3	1	2-6	2	3-29	0	3-65	0	3-99	0
Transmittal	2	2-7	0	3-30	0	3-66	0	3-100	0
Highlights		2-8	0	3-31	1	3-67	0	3-101	0
1	2	2-9	0	3-32	0	3-68	0	3-102	0
2	2	3-i	2	3-33	0	3-69	2	3-103	0
3	2	3-ii	2	3-34	0	3-70	1	3-104	0
Cover		3-iii	1	3-35	0	3-71	1	3-105	0
1-i	1	3-iv	2	3-36	0	3-72	1	3-106	0
1-1	0	3-1	0	3-37	0	3-73	0	3-107	0
1-2	0	3-2	0	3-38	1	3-74	0	3-108	0
1-3	0	3-3	0	3-39	0	3-75	1	3-109	0
1-4	0	3-4	0	3-40	0	3-76	1	3-110	0
1-5	0	3-5	0	3-41	0	3-77	1	3-111	0
1-6	0	3-6	2	3-42	0	3-77A	1	3-112	0
1-7	0	3-7	2	3-43	0	3-77B	1	3-113	0
1-8	0	3-8	2	3-44	0	3-78	0	3-114	0
1-9	0	3-9	1	3-45	0	3-79	0	3-115	0
1-10	1	3-10	1	3-46	0	3-80	0	3-116	0
1-11	1	3-11	1	3-47	0	3-81	0	3-117	1
1-12	0	3-12	1	3-48	2	3-82	1	3-118	2
1-13	0	3-13	1	3-49	0	3-83	0	4-i	1
1-14	0	3-14	1	3-50	1	3-84	1	4-1	1
1-15	0	3-14A	1	3-50A	1	3-84A	1	4-2	0
1-16	0	3-14B	1	3-50B	1	3-84B	1	4-3	0
1-17	0	3-15	0	3-51	0	3-85	0	4-4	0
1-18	0	3-16	0	3-52	0	3-86	0	4-5	0
1-19	0	3-17	0	3-53	1	3-87	0	4-6	0
1-20	0	3-18	0	3-54	0	3-88	0	4-7	1
1-21	0	3-19	0	3-55	0	3-89	0	4-8	1
1-22	0	3-20	0	3-56	0	3-90	0	4-9	1
2-i	2	3-21	0	3-57	0	3-91	0	4-10	0
2-1	0	3-22	0	3-58	0	3-92	0	4-11	0
2-2	0	3-23	0	3-59	0	3-93	0	4-12	0
2-3	1	3-24	0	3-60	0	3-94	0	4-13	0
2-4	2	3-25	0	3-61	1	3-95	0	4-14	0

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4-15	0	5-25	1	5-61	0	5-99	1	5-137	0
4-16	1	5-26	0	5-62	2	5-100	1	5-138	0
4-17	0	5-27	0	5-63	2	5-101	1	5-139	0
4-18	0	5-28	0	5-64	1	5-102	0	5-140	0
5-i	2	5-29	0	5-65	1	5-103	0	5-141	0
5-ii	2	5-30	1	5-66	0	5-104	0	5-142	0
5-iii	1	5-31	1	5-67	0	5-105	0	5-143	0
5-iv	1	5-32	1	5-68	0	5-106	0	5-144	0
5-v	1	5-32A	1	5-69	0	5-107	0	5-145	0
5-vi	1	5-32B	1	5-70	2	5-108	0	5-146	0
5-1	2	5-33	0	5-71	2	5-109	0	5-147	0
5-2	2	5-34	0	5-72	0	5-110	0	5-148	0
5-3	0	5-35	0	5-73	0	5-111	0	5-149	0
5-4	2	5-36	0	5-74	0	5-112	0	5-150	0
5-5	1	5-37	0	5-75	0	5-113	0	5-151	0
5-6	1	5-38	0	5-76	0	5-114	0	5-152	1
5-7	1	5-39	0	5-77	0	5-115	0	5-152A	1
5-8	1	5-40	0	5-78	1	5-116	0	5-152B	1
5-9	0	5-41	0	5-79	1	5-117	0	5-152C	1
5-10	0	5-42	2	5-80	1	5-118	0	5-152D	1
5-11	0	5-43	0	5-81	0	5-119	0	5-152E	1
5-12	0	5-44	0	5-82	0	5-120	0	5-152F	1
5-13	1	5-45	0	5-83	1	5-121	0	5-152G	1
5-14	2	5-46	0	5-84	0	5-122	0	5-152H	1
5-15	1	5-47	0	5-85	0	5-123	0	5-152I	1
5-15A	1	5-48	0	5-86	0	5-124	0	5-152J	1
5-15B	1	5-49	2	5-87	0	5-125	0	5-152K	1
5-16	0	5-50	0	5-88	0	5-126	0	5-152L	1
5-17	2	5-51	0	5-89	0	5-127	0	5-152M	1
5-18	0	5-52	0	5-90	1	5-128	0	5-152N	1
5-19	0	5-53	0	5-91	1	5-129	0	5-152O	1
5-20	1	5-54	0	5-92	1	5-130	0	5-152P	1
5-20A	1	5-55	0	5-93	1	5-131	0	5-152Q	1
5-20B	1	5-56	0	5-94	1	5-132	0	5-152R	1
5-21	1	5-57	0	5-95	1	5-133	1	5-152S	1
5-22	0	5-58	0	5-96	0	5-134	0	5-152T	1
5-23	0	5-59	0	5-97	0	5-135	0	5-152U	1
5-24	0	5-60	0	5-98	1	5-136	0	5-152V	1

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5-152X	1	5-190	0	6-24	0	6-62	0	7-22	1
5-153	0	5-191	0	6-25	0	6-63	0	7-23	1
5-154	0	5-192	0	6-26	0	6-64	0	7-23A	1
5-155	0	5-193	0	6-27	0	6-65	0	7-23B	1
5-156	0	5-194	0	6-28	0	6-66	0	7-24	1
5-157	0	5-195	0	6-29	0	6-67	0	7-25	0
5-158	0	5-196	0	6-30	0	6-68	0	7-26	0
5-159	0	5-197	0	6-31	0	6-69	0	7-27	0
5-160	0	5-198	0	6-32	0	6-70	0	7-28	0
5-161	0	5-199	1	6-33	0	6-71	0	7-29	0
5-162	0	5-200	1	6-34	0	6-72	0	7-30	0
5-163	0	6-i	2	6-35	0	6-73	0	7-31	0
5-164	0	6-ii	0	6-36	0	6-74	0	7-32	1
5-165	0	6-iii	2	6-37	0	6-75	1	7-33	1
5-166	0	6-iv	1	6-38	0	6-76	1	7-34	0
5-167	0	6-1	0	6-39	0	7-i	2	7-35	0
5-168	0	6-2	0	6-40	0	7-ii	1	7-36	0
5-169	0	6-3	0	6-41	0	7-1	0	7-37	0
5-170	0	6-4	0	6-42	0	7-2	0	7-38	0
5-171	0	6-5	2	6-43	0	7-3	1	7-39	0
5-172	0	6-6	2	6-44	0	7-4	1	7-40	0
5-173	0	6-7	1	6-45	0	7-5	1	7-41	0
5-174	0	6-8	1	6-46	0	7-6	1	7-42	0
5-175	0	6-9	0	6-47	0	7-7	1	8-i	0
5-176	0	6-10	0	6-48	0	7-8	1	8-1	0
5-177	0	6-11	0	6-49	0	7-9	0	8-2	0
5-178	0	6-12	0	6-50	0	7-10	0	8-3	0
5-179	0	6-13	2	6-51	0	7-11	0	9-i	1
5-180	0	6-14	0	6-52	0	7-12	0	9-ii	0
5-181	0	6-15	0	6-53	0	7-13	0	9-1	0
5-182	0	6-16	0	6-54	0	7-14	0	9-2	0
5-183	0	6-17	0	6-55	0	7-15	0	9-3	0
5-184	0	6-18	0	6-56	0	7-16	0	9-4	1
5-185	0	6-19	1	6-57	0	7-17	2	9-5	0
5-186	0	6-20	0	6-58	0	7-18	0	9-6	0
5-187	0	6-21	0	6-59	2	7-19	1	9-7	0
5-188	0	6-22	0	6-60	0	7-20	0	9-8	0

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9-9	0	9-47	0	10-18	0	10-56	0	10-94	1
9-10	0	9-48	0	10-19	0	10-57	0	10-95	1
9-11	0	9-49	0	10-20	1	10-58	1	10-96	1
9-12	0	9-50	0	10-21	0	10-59	1	10-97	1
9-13	0	9-51	0	10-22	0	10-60	0	10-98	1
9-14	0	9-52	0	10-23	1	10-61	0	10-99	1
9-15	0	9-53	0	10-24	2	10-62	0	10-100	1
9-16	0	9-54	0	10-25	0	10-63	0	10-101	1
9-17	0	9-55	0	10-26	1	10-64	0	10-102	1
9-18	0	9-56	0	10-27	1	10-65	0	10-103	1
9-19	0	9-57	0	10-28	0	10-66	0	10-104	1
9-20	0	9-58	0	10-29	0	10-67	1	10-105	0
9-21	0	9-59	0	10-30	0	10-68	1	10-106	0
9-22	0	10-i	2	10-31	0	10-69	0	10-107	0
9-23	0	10-ii	1	10-32	1	10-70	2	10-108	0
9-24	0	10-iii	2	10-33	1	10-71	1	10-109	2
9-25	0	10-iv	2	10-34	0	10-72	2	10-110	1
9-26	0	10-v	2	10-35	0	10-73	0	10-111	0
9-27	0	10-vi	1	10-36	1	10-74	2	10-112	0
9-28	0	10-vii	2	10-37	1	10-75	1	10-113	0
9-29	0	10-viii	1	10-38	1	10-76	1	10-114	0
9-30	0	10-1	0	10-39	1	10-77	1	10-115	1
9-31	0	10-2	2	10-40	1	10-78	1	10-116	1
9-32	0	10-3	0	10-41	0	10-79	1	10-117	1
9-33	0	10-4	1	10-42	0	10-80	1	10-118	1
9-34	0	10-5	0	10-43	0	10-81	1	10-119	1
9-35	0	10-6	0	10-44	0	10-82	1	10-120	1
9-36	1	10-7	0	10-45	0	10-83	1	10-121	1
9-37	1	10-8	0	10-46	0	10-84	1	10-122	1
9-38	0	10-9	0	10-47	1	10-85	1	10-123	1
9-39	0	10-10	0	10-48	1	10-86	1	10-124	1
9-40	0	10-11	0	10-49	0	10-87	1	10-125	1
9-41	0	10-12	0	10-50	0	10-88	1	10-126	1
9-42	0	10-13	0	10-51	0	10-89	1	10-127	1
9-43	0	10-14	0	10-52	0	10-90	1	10-128	1
9-44	0	10-15	0	10-53	0	10-91	1	10-129	1
9-45	0	10-16	0	10-54	0	10-92	1	10-130	1
9-46	0	10-17	0	10-55	0	10-93	1	10-131	1

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10-133	1	10-153	0	10-191	1	10-229	0	10-265	2
10-134	1	10-154	0	10-192	0	10-230	0	10-266	2
10-135	1	10-155	1	10-193	0	10-231	0	10-267	0
10-136	1	10-156	0	10-194	0	10-232	0	10-268	0
10-137	1	10-157	0	10-195	0	10-233	0	10-269	0
10-138	1	10-158	0	10-196	1	10-234	0	10-270	0
10-139	1	10-159	0	10-197	0	10-235	0	10-271	0
10-140	1	10-160	0	10-198	0	10-236	0	10-272	0
10-141	1	10-161	0	10-199	0	10-237	0	10-273	2
10-141A	1	10-162	0	10-200	0	10-238	0	10-274	0
10-141B	1	10-163	0	10-201	0	10-239	0	10-275	1
10-141C	1	10-164	0	10-202	0	10-240	0	10-276	1
10-141D	1	10-165	0	10-203	0	10-241	0	10-277	1
10-141E	1	10-166	0	10-204	0	10-242	1	10-278	1
10-141F	1	10-167	0	10-205	0	10-243	1	10-279	0
10-141G	1	10-168	0	10-206	0	10-244	0	10-280	0
10-141H	1	10-169	0	10-207	0	10-245	0	10-281	0
10-141I	1	10-170	0	10-208	0	10-246	0	10-282	0
10-141J	1	10-171	2	10-209	0	10-247	0	10-283	0
10-141K	1	10-172	0	10-210	0	10-248	0	10-284	1
10-141L	1	10-173	1	10-211	0	10-249	0	10-285	0
10-141M	1	10-174	0	10-212	0	10-250	0	10-286	0
10-141N	1	10-175	0	10-213	0	10-251	0	10-287	0
10-141O	1	10-176	0	10-214	0	10-252	0	10-288	0
10-141P	1	10-177	0	10-215	1	10-253	0	10-289	0
10-141Q	1	10-178	0	10-216	0	10-254	0	10-290	0
10-141R	1	10-179	2	10-217	0	10-255	0	10-291	1
10-142	0	10-180	2	10-218	0	10-256	0	10-292	0
10-143	0	10-181	0	10-219	0	10-257	0	10-293	0
10-144	0	10-182	1	10-220	0	10-258	0	10-294	0
10-145	1	10-183	0	10-221	0	10-259	1	10-295	1
10-146	0	10-184	0	10-222	0	10-260	1	11-i	0
10-147	0	10-185	0	10-223	0	10-261	1	11-ii	2
10-148	0	10-186	0	10-224	0	10-262	1	11-1	0
10-149	0	10-187	0	10-225	0	10-263	1	11-2	0
10-150	0	10-188	0	10-226	0	10-264	1	11-3	0
10-151	0	10-189	1	10-227	0	10-264A	1	11-4	0

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11-5	0	12-16	1	12-80	0	12-118	0	13-30	0
11-6	0	12-17	0	12-81	0	12-119	0	13-31	0
11-7	0	12-18	0	12-82	0	12-120	0	13-32	0
11-8	0	12-19	0	12-83	0	12-121	0	13-33	0
11-9	0	12-20	0	12-84	0	12-122	0	13-34	0
11-10	0	12-21	0	12-85	0	12-123	0	13-35	0
11-11	0	12-22	1	12-86	0	12-124	0	13-36	0
11-12	0	12-23 thru		12-87	0	13-i	2	13-37	0
11-13	0	12-50	Deleted	12-88	0	13-ii	1	13-38	0
11-14	0	12-51	1	12-89	0	13-1	0	13-39	0
11-15	0	12-52	0	12-90	0	13-2	0	13-40	2
11-16	0	12-53	0	12-91	0	13-3	0	13-41	0
11-17	0	12-54	0	12-92	0	13-4	0	13-42	0
11-18	0	12-55	0	12-93	0	13-5	0	14-i	2
11-19	0	12-56	0	12-94	0	13-6	0	14-ii	0
11-20	0	12-57	0	12-95	0	13-7	0	14-iii	0
11-21	0	12-58	0	12-96	0	13-8	0	14-iv	2
11-22	0	12-59	0	12-97	0	13-9	0	14-v	0
11-23	2	12-60	0	12-98	0	13-10	0	14-vi	0
11-24	0	12-61	0	12-99	0	13-11	0	14-1	0
12-i	1	12-62	0	12-100	0	13-12	0	14-2	0
12-ii	0	12-63	0	12-101	0	13-13	2	14-3	2
12-iii	1	12-64	0	12-102	0	13-14	0	14-4	0
12-1	0	12-65	0	12-103	0	13-15	0	14-5	0
12-2	0	12-66	0	12-104	0	13-16	0	14-6	0
12-3	0	12-67	0	12-105	0	13-17	0	14-7	0
12-4	0	12-68	0	12-106	0	13-18	0	14-8	0
12-5	0	12-69	0	12-107	0	13-19	0	14-9	0
12-6	0	12-70	0	12-108	0	13-20	0	14-10	0
12-7	0	12-71	0	12-109	1	13-21	0	14-11	0
12-8	0	12-72	0	12-110	Deleted	13-22	0	14-12	0
12-9	0	12-73	0	12-111	Deleted	13-23	1	14-13	0
12-10	0	12-74	0	12-112	1	13-24	2	14-14	0
12-11	0	12-75	0	12-113	0	13-25	0	14-15	2
12-12	0	12-76	0	12-114	0	13-26	0	14-16	0
12-13	0	12-77	0	12-115	0	13-27	0	14-17	0
12-14	0	12-78	0	12-116	0	13-28	0	14-18	1
12-15	0	12-79	0	12-117	0	13-29	0	14-19	0

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14-21	0	14-59	0	14-97	0	14-135	0	15-19	0
14-22	0	14-60	0	14-98	0	14-136	0	15-20	0
14-23	0	14-61	0	14-99	0	14-137	0	15-21	1
14-24	0	14-62	0	14-100	0	14-138	0	15-22	0
14-25	0	14-63	0	14-101	0	14-139	0	15-23	0
14-26	0	14-64	0	14-102	0	14-140	0	15-24	0
14-27	0	14-65	0	14-103	0	14-141	0	15-25	2
14-28	0	14-66	0	14-104	0	14-142	0	15-26	2
14-29	0	14-67	0	14-105	0	14-143	0	15-27	2
14-30	0	14-68	0	14-106	0	14-144	0	15-28	2
14-31	0	14-69	0	14-107	0	14-145	0	15-29	0
14-32	0	14-70	0	14-108	0	15-i	2	15-30	0
14-33	0	14-71	0	14-109	0	15-ii	1	15-31	1
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DEPARTMENT OF THE NAVY  
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COMNAVAIRFORINST 4790.2A CH-2  
N422  
10 Nov 2009

COMNAVAIRFORINST 4790.2A CHANGE TRANSMITTAL 2

From: Commander, Naval Air Forces

Subj: THE NAVAL AVIATION MAINTENANCE PROGRAM (NAMP)

Ref: (a) OPNAVINST 4790.2J  
(b) COMNAVAIRFOR 080026Z May 09  
(c) COMNAVAIRFOR 120026Z May 09  
(d) COMNAVAIRFOR 280126Z Jul 09

Encl: (1) Highlights  
(2) List of Effective Pages

1. Purpose. This instruction issues the maintenance policies, procedures, and responsibilities for the conduct of the NAMP at all levels of maintenance. It is the responsibility of all aviation maintenance personnel throughout the Naval Aviation Enterprise (NAE) to comply with all written policies, procedures, and responsibilities concerning aviation maintenance support as set forth by CNO (reference (a)) and COMNAVAIRFOR.

2. Discussion. A brief summary of changes is contained in enclosure (1). A list of effective pages is contained in enclosure (2). References (b) through (d) have been incorporated into this instruction and are hereby cancelled.

3. Implementation. This change becomes effective 10 November 2009 and is to be implemented on that date. Activities shall download the NAMP from the COMNAVAIRSYSCOM website <http://www.navair.navy.mil/logistics/4790>. Under unique circumstances, activities may request a CD-ROM disc from COMNAVAIRFOR (Code N422C).

W. T. AINSWORTH  
By direction

**COMNAVAIRFORINST  
4790.2A  
Change Two**

**The Naval Aviation Maintenance Program (NAMP)  
HIGHLIGHTS**

Change Two to the NAMP has change indicators **A}**, **D}**, and **R}** placed within the text indicating the specific action taken. **A}** indicates information has been added, **D}** indicates a deletion, and **R}** indicates a revision to that section. The affected section of the text will be underlined. The following are Change Two highlights:

**Chapter 2 - Aircraft Controlling Custodians (ACCs) and Type Wing and Carrier Air Wing (CVW)**

1. Adds Safe for Flight training requirements.

**Chapter 3 - Maintenance Concepts, Programs, and Processes; Maintenance Unit Department; Division Organization; Manpower Management; and Aviation Officers**

1. Adds Maintenance Officer (MO) duties for ensuring accomplishment of training for safe for flight personnel.
2. Updates Marine Air Traffic Control and Landing Systems (MATCALS) responsibilities.

**Chapter 5 - Maintenance Control, Production Control, and Maintenance/Material Control; Aircraft Logbook (Paper), Reports, and Configuration Management (CM) Auto Log-sets (ALS); and Aircraft Inventory Readiness and Reporting System (AIRRS)**

1. Reduces Ready For Issue (RFI) components returned to Supply for missing records by attaching photocopy of Assembly Service Record (ASR), Equipment History Record (EHR), or Scheduled Removal Component (SRC) card on outside of the shipping container.
2. Eliminates requirement for Joint Strike Fighter (JSF) configuration verification during aircraft acceptance inspection when received from manufacturer. Specifies that disassembly, beyond daily inspection requirements to perform configuration verification, is not authorized without Type Commander (TYCOM) approval.
3. Adds Naval Aviation Maintenance Control Management course (Course D/E 555-0040).
4. Updates training requirements for all personnel authorized to release aircraft safe for flight.

**Chapter 6 - Production Divisions; Work Center Supervisor; Maintenance Training; and Training, Special Processes Certification and Licensing**

1. Replaces reference OPNAVINST 8020.14 with OPNAVINST 8023.24 for Explosives Handling Personnel Qualification and Certification Program requirements.

**Chapter 7 - Quality Assurance (QA) Division and Quality Programs**

1. Replaces reference OPNAVINST 8020.14 with OPNAVINST 8023.24 for Explosives Handling Personnel Qualification and Certification Program requirements.

## **Chapter 10 - Naval Aviation Maintenance Program Standard Operating Procedures (NAMPSOPs)**

1. Adds Fleet Readiness Center (FRC) equivalent to be designated in the Monthly Maintenance Plan (MMP) by the MO as a Navy Oil Analysis Program (NOAP) Manager.
2. Replaces reference OPNAVINST 8020.14 with OPNAVINST 8023.24 for Explosives Handling Personnel Qualification and Certification Program requirements.
3. Defines and clarifies Individual Component Repair List (ICRL) capability codes and maintenance levels.
4. Clarifies distinction between Corrosion Control classes taught by FRCs for fleet students and classes developed within the FRC for artisans.
5. Clarifies Aircraft Discrepancy Book (ADB)/Engine Aeronautical Equipment Service Record (AESR) Oil Consumption requirements as optional for engines capable of electronic oil consumption monitoring.

## **Chapter 11 - Contractor Maintenance, Commercial Derivative Aircraft Maintenance Programs, and Aspects of Aeronautical Weapons System Acquisition**

1. Identifies new location of Mission-Essential Subsystems Matrix/Matrices (MESM) on Commander, Naval Air Forces' (COMNAVAIRFOR) web portal.

## **Chapter 13 - Naval Aviation Logistics Command Management Information System (NALCOMIS) and Naval Tactical Command Support System (NTCSS) Optimized Organizational Maintenance Activity (OMA) NALCOMIS Data Collection System Center (NDCSC)**

1. Identifies new location of Mission-Essential Subsystems Matrix/Matrices (MESM) on Commander, Naval Air Forces' (COMNAVAIRFOR) web portal.

## **Chapter 14 - Introduction to the Maintenance Data System (MDS), MDS Reports, and MDS Analysis**

1. Updates data accuracy.

## **Chapter 15 - Organizational Level (O-Level) Maintenance Data System (MDS) Functions, Responsibilities, and Source Document Procedures**

1. Adds Equipment Operational Capability (EOC) Code A restrictions for legacy Naval Aviation Logistics Command Management Information System (NALCOMIS).

## **Chapter 16 - Intermediate Level (I-Level) Maintenance Data System (MDS) Functions, Responsibilities, and Source Document Procedures**

1. Identifies new location of Mission-Essential Subsystems Matrix/Matrices (MESM) on Commander, Naval Air Forces' (COMNAVAIRFOR) web portal.

## **Chapter 17 - Aircraft Material Condition Readiness**

1. Identifies new location of the MESM on COMNAVAIRFOR's web portal.

## **Appendix A - Acronyms, Abbreviations, and Definitions**

1. Updates acronyms, abbreviations, and definitions.

**Appendix B - Forms and Reports**

1. Updates forms and reports.

**Appendix C - Directives and Publications**

1. Updates directives and publications.

**Appendix E - Maintenance Documentation Codes**

1. Adds Job Status Code CT (AWM Cure Time (Adhesives, Sealant, Paint)).
2. Removes authorization for use of RR0 status code for reporting the disassembly, transport, and reassembly for aircraft transported by surface/air oplit.

**General**

1. Incorporates administrative corrections, such as directive and web site updates including MESM and ICRL.

**CHAPTER 2**  
**Aircraft Controlling Custodians (ACCs) and**  
**Type Wing and Carrier Air Wing (CVW)**

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(3) For all activities, AMMT observes evolutions, such as maintenance/production control prioritization, communication quality, workload management, performance of contingency drills, and practical maintenance tasks

b. Verification of safe operations. Drills and practical examinations will assist in the verification of sound maintenance practices, safety training effectiveness, availability and proper use of PPE, and the activity's ability to respond appropriately to emergent situations.

c. Compliance with governing instructions and directives. Compliance with all policies and procedures directed by higher authority remains critical to the overall success of the maintenance effort. Standard evaluations of NAMP, NAVAIR, TYCOM, Type Wing, NAVSUP, NAVOSH and other applicable directives will be performed to assess compliance and ensure completion of all required maintenance documentation and training.

2.1.3.2.1.3 Inspection frequency/periodicity will be scheduled, coordinated, and conducted by the TYCOM in a manner that considers operational schedules. AMIs shall be scheduled using the following criteria:

a. Deployable squadrons and CV/CVN/L-Class ships shall receive an AMI prior to each deployment.

(1) Deployable squadrons shall receive an AMI after being designated emergency surge capable with a target of 4 to 6 months prior to scheduled deployment. Type Wing/MAW may provide an assist visit prior to TYCOM Inspection.

**NOTE: At TYCOM discretion, tailored assist visits may be provided upon request and shall not be conducted within 180 days of the squadron's scheduled AMI.**

(2) CV/CVN/L-Class ships shall receive an AMI after being designated emergency surge capable with a target of 3 to 6 months prior to scheduled deployment and may be conducted during an underway evolution.

**NOTE: Tailored assist visits may be provided upon request and shall not be conducted within 90 days of the ship's scheduled AMI. Additionally, assist visits will be provided to newly commissioned CV/CVN/L-Class ships and post-refueling, complex overhaul CVNs.**

b. Permanently forward deployed units shall receive an AMI every 2 years.

c. COMFRC activities will receive an AMI at a 36-month interval.

d. Non-deploying squadrons will receive an AMI at a 24-month interval. The Type Wing/MAW will also perform **R} Maintenance Program Assistance** at a 24-month interval, alternating at a 12-month cycle.

e. In the event of changes in deployment schedules or operational commitments, Type Wing/MAW may be directed to conduct previously scheduled TYCOM AMI and forward results within 30 days to the appropriate TYCOM (Code 422C).

2.1.3.2.1.4 Activities scheduled for a TYCOM AMI shall, within 2 weeks of in brief, submit to the AMMT a self-assessment report which identifies current program/process deficiencies and planned corrective actions, with timeline. A copy of this report, without enclosures, shall be provided to the Type Wing/MAW.

2.1.3.2.1.4.1 O-level and I-level activities shall include the following enclosures to the self-assessment report:

(1) Current MMP.

## 2.2 Type Wing and Carrier Air Wing (CVW)

### 2.2.1 Policy

Administrative commanders, such as Type Wing commanders, are responsible for the aircraft material readiness, administration, training, and inspection of squadrons under their command. Operational commanders, such as CVW commanders, are responsible for the operational readiness, inspection, and overall performance of squadrons under their command.

### 2.2.2 Responsibilities

2.2.2.1 Training. The Type Wing exercises control of training over assigned squadrons and recommends training requirements and methods to ensure optimum material readiness of squadrons. Maintenance training requirements are as follows:

- a. Coordinate and monitor training in the wing.
- b. Monitor policies and procedures for the standardization of maintenance training units/ FREST/training reports.
- c. Monitor effectiveness of FREST by reviewing quotas, selectively interviewing FREST students, and surveying squadrons to evaluate the quality and quantity of FREST graduates.
- d. A} Develop local PQS/JQR for training and certification of maintenance control and safe for flight personnel. Emphasis shall be on the safe and effective management of aircraft, proper use of the MESM and documentation of SCIR, review of specific T/M/S publications, and completion of Type Wing and NAMP directed courses of instruction.

#### 2.2.2.2 Coordination

2.2.2.2.1 The Type Wing commanders are responsible for material readiness which includes aircraft CM and material condition, TDSA, OPTAR training, IMRL, and special programs for activities under their command. Type Wing MOs are responsible to the Type Wing Commander in all matters pertaining to aircraft maintenance. They shall perform the following primary functions:

- a. Manage maintenance processes and programs to ensure optimum aircraft material condition and compliance with NAMP procedures.
- b. Manage aircraft and weapon systems assets to ensure sufficient and properly configured aircraft, ancillary equipment, engines, and avionics are available to supported activities.
- c. Facilitate logistics support to optimize SE, repairables, consumables, and services availability.
- d. Facilitate technical support to provide information flow and assistance from COMFRCs, ISSCs, contractors, and COMNAVAIRSYSCOM activities.
- e. Manage aviation maintenance manpower and personnel assets and programs to ensure valid personnel requirements, optimized assignment of personnel to supported squadrons, both quality and quantity, and feedback to upline manpower or manning authorities.
- f. Manage and monitor aviation maintenance training programs so that all required training is accomplished, available training courses are routinely validated, and training assets and expertise are provided when necessary.
- g. Conduct both short and long range planning in support of all services provided to supported activities.
- h. Coordinate COMFRC requirements to optimize scheduled requirements, expedite unscheduled requirements, and improve quality of provided services.

**CHAPTER 3**  
**Maintenance Concepts, Programs and Processes, Maintenance Unit**  
**Department, Division Organization, Manpower Management,**  
**and Aviation Officers**

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3.1.4.2.6 Navy squadrons and units are responsible for performing maintenance on assigned aircraft and equipment per [Figure 3-9](#).

3.1.4.2.7 Aviation FMF squadrons are responsible for accomplishing the levels of maintenance shown in [Figure 3-10](#).

3.1.4.2.8 Naval Air Training and Marine Air Reserve squadrons and units are responsible for performing the levels of maintenance shown in [Figure 3-11](#).

3.1.4.2.8A MATCDs, operating under MACs, are responsible for performing O-level maintenance on assigned MATCALS ([Figure 3-34](#)).

3.1.4.2.8A.1 COMNAVAIRSYSCOM (AIR-6.6) is responsible for managing MATCALS.

3.1.4.2.8A.2 PMA-213 is responsible for program management.

3.1.4.2.8A.3 COMNAVAIRSYSCOM (AIR 6.6) and SPAWARSYSCEN (Code 2336) provide fleet support.

3.1.4.2.9 Other special activities and units, for example, Mine Countermeasure Unit, CENNAVAVN-TECHTRA, and TSC assigned aircraft or operating equipment originally designed for use in aircraft, are responsible for performing the level(s) of maintenance shown in [Figure 3-12](#).

## 3.2 Maintenance Programs and Processes

### 3.2.1 Naval Aviation Maintenance Program Standard Operating Procedures (NAMPSOPs)

a. NAMPSOP maintenance programs are intended to be implemented using this instruction and specific program related technical manuals which are identified within the program text. Generation of supplemental instructions below the COMNAVAIRSYSCOM level (with the exception of Local Command Procedures ([Appendix D](#))) to augment these policy management documents are not authorized.

b. NAMPSOP maintenance programs are detailed in [Chapter 10](#).

**NOTE:** Special activities, for example, MATCDs, shall comply with NAMPSOP programs applicable to their maintenance level, equipment, or T/M/S. Any NAMPSOP program not applicable to the special activity shall be approved by TYCOM.

### 3.2.2 Non-NAMPSOP Maintenance Programs

a. Non-NAMPSOP maintenance programs addressed in this chapter are intended to be implemented using this instruction and specific program related technical manuals which are identified within the program text. Generation of supplemental instructions below ACC/TYCOM/Wing/MAG level to augment these policy management documents are not authorized.

**NOTE:** Special activities, for example, MATCDs, shall comply with non-NAMPSOP programs applicable to their maintenance level, equipment, or T/M/S. Any non-NAMPSOP program not applicable to the special activity shall be approved by TYCOM.

b. All letters of designation, qualification, certification, course completion, medical certification, and completed maintenance related PQS shall be filed in the individual's qualification/certification record.

### **3.2.2.1 Nondestructive Inspection (NDI) Program**

3.2.2.1.1 During inspection of aircraft, it is essential that defects are detected and corrected before they reach catastrophic proportions. NDI can detect defects with a high degree of accuracy and with no adverse affect upon the use of the part or system being inspected. The effective application of NDI has resulted in increased operational safety and in many instances, dramatically reduced maintenance man-hours and material expenditures.

3.2.2.1.2 NDI is the practice of evaluating a part or sample of material without impairing its future usefulness. Basic NDI methods include, but are not limited to, fluorescent, penetrant, magnetic particle, eddy current, ultrasonic, and radiographic. NDI Program success depends heavily upon training, sustained proficiency, intelligent application, discriminating interpretation of results, and the availability of the necessary tools.

3.2.2.1.3 NDI is of vital concern at all levels of maintenance. All operational and support commanders shall direct their efforts toward its proper use. NDI shall be used in the maintenance of Navy and Marine Corps aircraft and aircraft systems wherever contributions to safety, reliability, QA, performance, or economy can be realized.

3.2.2.1.4 NDI shall only be performed by certified NDI personnel using NAVAIR 01-1A-16, NAVAIR 01-1A-16-2, applicable TDs, and technical publications. NDI has proven to be a valuable maintenance tool:

- a. Where internal defects cannot be detected visually.
- b. Where structural or component disassembly can be avoided.
- c. For QA in the detection of substandard materials or conditions.
- d. As an input for changes to, and to prove the validity of, periodic maintenance requirements.

**NOTES: 1. The terms qualified, certified, or proficient do not precede any instance of NDI Instructor, NDI Specialist, NDI Technician, or NDI Operator within the NDI Program text. When these personnel are listed within this text, it denotes qualified, certified, or proficient.**

**2. NDI Instructor, Specialist, Technician, and Operator training and certification shall be per this chapter.**

**3. FRC NDI personnel shall be certified per [Chapter 6](#).**

**4. Contractor NDI personnel shall be certified per NAS 410 unless otherwise stated within specific contract stipulations.**

**5. Unique operational locations may preclude IMA/FRC NDI support. In such instances, Army certified NDI personnel per TM 1-1500-335-23 and Air Force certified NDI personnel per T.O. 33B-1-1, may provide NDI services. When necessary, the MO may grant authorization for Army and Air Force NDI services. All NDIs performed must be per the applicable TD/technical publication and supervised by a QAR.**

**6. Army and Air Force NDI personnel are not authorized to provide refresher training, method-specific training, task-specific hands on training, supervised work experience, certification or triennial 3-year recertification of NDI technicians, or certification or annual recertification of NDI operators.**

### **3.2.2.1.5 Responsibilities**

3.2.2.1.5.1 COMNAVAIRSYSCOM (AIR-4.3.4.3) has overall cognizance of the NDI Program and is responsible for managing a program of research, development, training, and application of NDI techniques and equipment. NAVAIRINST 13070.1 assigns the responsibilities within COMNAVAIRSYSCOM for the various elements of the NDI Program. COMNAVAIRSYSCOM (AIR-4.3.4.3) shall:

- a. Coordinate and issue information on NDI within naval aviation, other services, and industry (as appropriate).
- b. Review NDI technical publications and update publications as newer techniques and applications are developed.
- c. Establish NDI standards and specifications.

3.2.2.1.5.2 ACCs/TYCOMs shall:

- a. Monitor the NDI Program in activities under their cognizance.
- b. Advise on availability and location of NDI training.
- c. Maintain liaison with COMNAVAIRSYSCOM, FRCs, and fleet activities on NDI matters.
- d. Ensure NDI laboratories, equipment, and personnel are audited (as required).
- e. Designate NDI specialists.
- f. Assign an NDI Program Manager.

3.2.2.1.5.3 IMAs/FRCs shall:

- a. Ensure compliance with qualification requirements and safety precautions.
- b. Ensure industrial radiation safety requirements are strictly enforced per NAVSEA S0420-AA-RAD-010.
- c. Use available NDI equipment fully and develop new procedures and applications, as far as practical, to provide labor, material, and cost savings.
- d. Maintain an adequate number of NDI technicians at all times to provide NDI services to supported organizations and transient aircraft hosted maintenance.
- e. Ensure the NDI equipment and laboratory spaces are continuously ready for use. This includes availability of required consumable items.
- f. Establish and maintain a continuing training program, to be verified during Type Wing and ACC/TYCOM audits, within the NDI Branch to provide supervised work experience to new NDI technicians and a mechanism for all NDI technicians to become proficient with newly developed NDI techniques, applications, and SE.
- g. Establish and maintain liaison with the cognizant ACC/TYCOM designated NDI Specialist and request assistance, via the chain of command, on all NDI deficiencies (as required).
- h. Provide and maintain industrial X-ray film processing facilities, both ashore and afloat (as applicable).
- i. Establish and maintain liaison with the designated Radiation Safety Officer.
- j. Provide NDI technician representation to the annual COMNAVAIRSYSCOM NDI Working Group meeting for training and communication between COMNAVAIRSYSCOM, ACC/TYCOMs, NDI support equipment managers, NDI instructors, Navy Personnel Command NDI detailers, and other services.

**NOTE: NDI MAFs/WOs shall have the inspected block signed by a CDI, CDQAR, or QAR to establish accountability for tools, IMRL equipment, accessories, and consumables used when performing NDI functions.**

3.2.2.1.5.4 O-level activities shall:

- a. Request IMA/ FRC NDI support (as required).



welders for a maximum of 90 days in cases where test welds have been submitted but results and recertification documentation have not been received from the cognizant examination and evaluation facility.

3.2.2.21.6 Welders whose test specimens fail to meet minimum requirements are allowed one retest. Retest requires submission of a double set of test welds of the failed group(s) of metal(s) to the same welding examination and evaluation facility that failed the first test weld(s). Welding examination and evaluation facilities shall forward double sets of test plates to the failed welder's command concurrently with notification of failure. Retest welds must be submitted within 30 days of receiving notification of failure of first test weld(s). Failure of any test welds to meet the minimum requirements will require the welder to satisfactorily complete the following course(s) (as applicable) to recertify:

- a. Aircraft/Support Equipment Basic Welding Recertification course (Course N-701-0008).
- b. Oxyfuel/Shielded Metal Arc Welder Recertification course (Course N-701-0010).

3.2.2.21.7 NAVAIR 01-1A-34 contains additional information and guidance relative to qualification, certification, recertification, and employment of aeronautical welders. However, it is a general series technical manual intended to be used in conjunction with this instruction and with specific maintenance/repair/overhaul manuals/engineering documents. In cases of conflict between NAVAIR 01-1A-34 and this instruction regarding certification/recertification policy, this instruction shall take precedence.

### **3.2.2.22 Vibration Analysis Program**

3.2.2.22.1 Vibration analysis provides the capability to detect faults and degradation in aircraft, dynamic components, and engines by the analysis of trends in vibration characteristics. The objectives are to reduce vibration related material failures, reduce crew fatigue, and improve safety, reliability, and readiness.

3.2.2.22.2 The provisions of this program apply to all aircraft that require vibration analysis. Applicable aircraft MRCs and MIMs contain requirements and procedures for troubleshooting, performing vibration analysis, documenting and reporting the results, training, and record keeping requirements.

3.2.2.22.3 The FRC Production Department is responsible for ensuring vibration testing on uninstalled aircraft engines and dynamic components is performed (as required ) by applicable MRCs and MIMs.

### **3.2.2.23 D}**

### **3.2.2.24 Expeditionary Airfield (EAF) Program**

EAF is a shore-based, Aviation Weapons Support System that permits deployment of landing force aircraft within effective range of ground forces. The goal of the EAF is to provide the task MAGTF with a flexible capability to rapidly deploy and establish survivable, self-sustaining airfields in support of the Aviation Combat Element for employment in an Expeditionary Operation. The EAF subsystems include an airfield surface system, aircraft recovery system, airfield terminal guidance system, and airfield lighting and marking systems. The maintenance program for EAF follows the guidelines of this instruction. EAF serves as a single functional program with multiple internal functional areas. Program management resides in COMNAVAIRSYSCOM (PMA-251).

(5) Local aviation supply support policies including fleet level support procedures and departmental relationships, NMCS, PMCS expediting, material management policies relating to the LRCA, PEBs, IMRL review and revision, and methods of measuring performance.

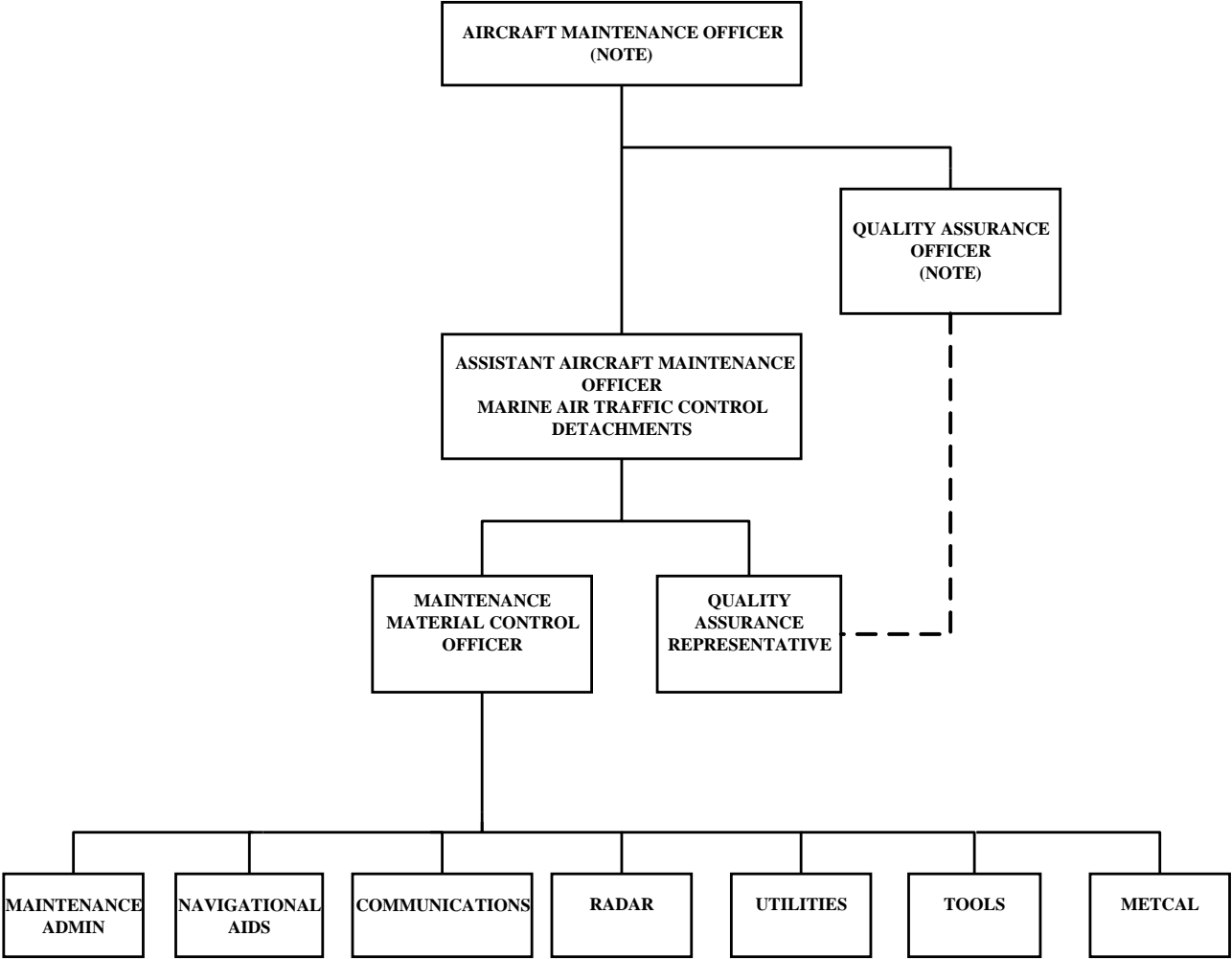
1. An understanding of HAZMAT/HAZWASTE procedures including the application and requirements of local policies and procedures as they pertain to aviation supply.

### **3.5.3 Maintenance Officer (MO) Duties and Responsibilities**

3.5.3.1 As head of the Maintenance Department, the MO manages the department and is responsible to the CO for the accomplishment of the department's mission. CV IMA MOs shall also coordinate the Air Wing Training Plan to ensure billet requirements, personnel identification, and assignments are satisfied. The MO will ensure the ASM is conducted per ACC/TYCOM directives.

3.5.3.2 The MO shall:

- a. Administer the operation of the Maintenance Department per the NAMP.
- b. Ensure redundancy of component repair capabilities within an IMA is avoided wherever possible by employing sound management practices in the handling of personnel, facilities, material, and in work flow methods. To prevent redundancy of repair capabilities, consideration should be given to established IMA repair capabilities when establishing an ICRL for SE components.
- c. Define and assign responsibilities, functions, and operations per existing directives.
- d. Organize the department and initiate requests for, and make recommendations relative to, changes concerning personnel, facilities, and equipment required to accomplish assigned tasks.
- e. Ensure the accomplishment of training for permanently and temporarily assigned personnel.  
A} Monitor completion of type wing developed PQS/JQR for the training certification of maintenance control and safe for flight personnel.
- f. Analyze the mission accomplishment and capabilities of the department and ensure timely planning is conducted and a statement of requirements to meet future needs is initiated, using reports provided by the MDS or NTCSS Optimized NALCOMIS on a continuous and progressive basis.
- g. Ensure full and effective employment of assigned personnel.
- h. Ensure the production output of the department is of proper quantity and quality per applicable specifications and directives.
- i. Maintain liaison with other department heads, representatives of higher authority, and other maintenance organizations. Liaison will include attendance at monthly IMA and Supply Department interface meetings.
- j. Publish and ensure internal compliance with maintenance, safety, and security procedures to ensure optimum performance is achieved.
- k. Schedule and hold periodic planning and informational meetings.
- l. Ensure the auditing of all maintenance programs and processes per [Chapter 10](#).
- m. Provide aviation 3M Summaries to show use of manpower, equipment, and facilities to the CO and other superiors in the chain of command, when requested.



NOTE: This is a staff billet at the MACS S-6.

Figure 3-34: R} O-Level Marine Air Traffic Control Detachment Organization

## CHAPTER 5

### **Maintenance Control, Production Control, and Maintenance Material/Control; Aircraft Logbook (Paper), Reports, and Configuration Management (CM) Auto Log- sets (ALSS); and Aircraft Inventory and Readiness Reporting System (AIRRS)**

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## CHAPTER 5

### **Maintenance Control, Production Control, and Maintenance Material/Control; Aircraft Logbook (Paper), Reports, and Configuration Management (CM) Auto Log- sets (ALSS); and Aircraft Inventory and Readiness Reporting System (AIRRS)**

#### **5.1 Maintenance Control, Production Control, and Maintenance Material/Control**

##### **5.1.1 Maintenance Control**

Management is defined as "the efficient attainment of objectives," and maintenance as, "all actions taken to retain material in a serviceable condition or to restore it to serviceability". When combined, maintenance management can be defined as "the actions necessary to retain or restore material or equipment to a serviceable condition with a minimum expenditure of resources". It is the responsibility of every maintenance manager to manage resources in an efficient manner.

**NOTE:** To meet the above requirement, all OMA Maintenance Control personnel, officer and enlisted, E-6 and above of OMA NALCOMIS Optimized squadrons shall complete the Naval Aviation Officer and Senior Supervisor NALCOMIS OOMA Familiarization course (Course D/E-555-0054) A and Naval Aviation Maintenance Control Management course (Course D/E 555-0040). In squadrons that use NALCOMIS (Legacy), all OMA Maintenance Control personnel, officer and enlisted, E-6 and above shall complete the Naval Aviation Maintenance Control Management course (Course D/E-555-0040).

##### **5.1.1.1 System Administrator/Analyst (SA/A) Responsibilities**

5.1.1.1.1 The SA/A shall provide qualitative and quantitative analytical information to the MO allowing a continuous review of the management practices within the activity/department. An SA/A billet will be established in O-level and I-level activities to monitor, control, and apply the MDS or CM within the activity. The SA/A will serve as a contact point between work centers and the NDCSC and is responsible for the management of all aspects of the MDS to include NALCOMIS reports/inquiries at the activity level. Additionally, for CM, the SA/A shall have a full working knowledge of the principles of foundation, mid, and top tier data replication and ADW.

**NOTE:** If operating with VIDS, the analyst will be assigned to QA, Work Center 04C.

5.1.1.1.2 The SA/A must be a senior petty officer or NCO formally trained in MDS procedures to include NALCOMIS, data processing capabilities, data replication between the foundation, mid tiers, top tiers, and ADW and the techniques of statistical analysis. It is imperative the SA/A receive the complete support of the MO, division officers, and work center supervisors.

**NOTES:** 1. Within the scope of manpower management, the NALCOMIS SA/A is a significant activity information resource. In the areas of accurate MDS and flight data, the analyst is the one individual within the activity who can either prove or disprove the justification for manpower increases and decreases. A complete understanding of NAMP policies and procedures, accurate documentation procedures, meticulous attention to detail, a viable aviation 3M/NAVFLIRS Naval Flight Documents training program, and close communication between analysts at similar activities should be foremost in the primary and technical responsibilities of the data analyst.

2. OMA NALCOMIS Optimized squadrons shall have two SAs attend the NALCOMIS OOMA System Administrator course (Course D/E-555-0049). NALCOMIS (Legacy) squadrons shall have two SAs complete the NALCOMIS System Administrator course (Course D/E-555-0028).

3. OMA NALCOMIS Optimized squadrons that operate from a detachment based concept for 90 days or longer periods of time shall have one SA per detachment attend the NALCOMIS OOMA System Administrator course (Course D/E-555-0049). OMA NALCOMIS (Legacy)

squadrons that operate from a detached based concept for 90 days or longer periods of time shall have one SA per detachment complete the NALCOMIS (Legacy) System Administrator course (Course D/E-555-0028).

4. OMA NALCOMIS Optimized squadrons shall have two SAs or Logs and Records personnel attend the Naval Flight Information course (Course D/E-555-0052).

5. All Squadrons, IMAs and MALS shall have all AZs with NEC 6303, 6304, or MOS 6346 attend the Analyst Refresher course (Course D/E-555-0055).

6. D}\_\_\_\_\_.

5.1.1.1.3 The primary analyst responsibilities of the SA/A include the following:

a. Provide management with data, in graphic and narrative form, necessary to make qualitative decisions about aircraft, equipment, test bench, SE, material condition, readiness, utilization, maintenance workload, or failure trends.

b. Collect, screen, and forward all MDS data to the NDCSC for processing. Ensure data reports are picked up and disseminated throughout the organization. Processing is accomplished through data replication to the top tier for activities with NTCSS Optimized OMA NALCOMIS.

c. Act as the squadron coordinator for corrections to NAVFLIRS DARs where common data elements are used in both the maintenance and operations departments. There are no Naval Flight Document DARs for activities with NTCSS Optimized OMA NALCOMIS.

d. Verify corrections to DARs and forward to the NDCSC (as appropriate). Resubmit via on-line NALCOMIS function. Corrections or change procedures for NTCSS Optimized OMA NALCOMIS naval flight documents shall be performed prior to the Operations Clerk's approval. Upon the Operation Clerk's approval, the electronic record will be forwarded to the historical file.

e. Review data products for accuracy, completeness, and content.

f. Conduct and coordinate MDS/NALCOMIS training of maintenance department personnel in all facets of documentation and in the content and use of available data products.

g. Coordinate with the NDCSC to resolve problems.

h. Maintain MDS/NALCOMIS report files for the department per [Appendix B](#).

i. Ensure an adequate supply of source documents is on hand to support the MDS and NALCOMIS during system downtime contingency procedures.

j. Establish, within the activity, designated pickup and delivery points, and times for source document and data product routing consistent with local NDCSC requirements. This is not required for activities with NTCSS Optimized NALCOMIS.

k. Categorize all MDS source documents using the DCF prior to delivery to the NDCSC for processing. To maintain an even workload, source documents shall be delivered to the NDCSC at least once daily. If operating NALCOMIS, ensure tracking procedures are developed to account for data deliveries and pick-ups. This is not required for activities with NTCSS Optimized NALCOMIS.

5.1.1.2.2 The person certifying a safe for flight condition has the overall responsibility to provide the aircrew with the best product available. All personnel authorized to release aircraft safe for flight shall A} complete the approved type wing mandated PQS/JQR for training and certification of maintenance control and safe for flight personnel, be designated in writing by the CO, and shall comply with the following requirements as a minimum:

a. Review the ADB to ensure A} all discrepancies are screened using the MESM for accurate reporting to ensure downing discrepancies and all flight safety QA inspections are signed off and a valid daily/turnaround inspection is completed.

**NOTE: Activities using NTCSS Optimized OMA NALCOMIS shall use and upkeep the AADB in the system. Additionally, with the NTCSS Optimized OMA NALCOMIS release 831-01.05.00 or greater, the SA/DBA shall perform a backup of all Aircraft AADB Summary pages in PowerSoft Report (PSR) format on an external media source, for example, thumb drive, floppy disk, CD, or external hard drive. At a minimum, AADB Summary page backups shall be performed prior to the first event of the flight schedule and at the end of each shift. Software to view/print the PSR format files may be loaded on the squadron's foundation tier server and on the NTCSS OMA NALCOMIS COTS DELTA CD.**

b. Ensure fuel samples are taken per T/M/S MIMs/MRCs/GAI manuals. Specific intervals for fuel samples are listed in the applicable aircraft MRCs. Unless otherwise specified in aircraft MRCs, fuel samples shall be taken within 24 hours preceding the aircraft's initial launch and shall not be valid for more than 24 hours.

c. Ensure the oil consumption has been reviewed for each engine/gearbox prior to every flight (as required).

d. Update aircraft W&B and configuration for each flight as applicable.

e. During hot seating operations, review any new discrepancies with the debarking pilot to ensure flight safety and have the debarking pilot sign block 10 of the Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1) verifying the aircraft is safe for flight.

5.1.1.2.3 The pilot-in-command shall review the ADB for aircraft discrepancies and corrective actions for at least the 10 previous flights and shall sign block 11 of the Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1), assuming full responsibility for the safe operation of the aircraft and the safety of the other individuals aboard.

5.1.1.2.4 The Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1) provides for:

- a. The pilot's acceptance of the aircraft in its present condition.
- b. Identification of aircraft by BUNO, T/M/S, and reporting custodian.
- c. Certification of an aircraft's readiness for flight by maintenance personnel, and a record of fuel, oil, oxygen, expendable ordnance aboard, special equipment, and limitations.

5.1.1.2.5 The record shall be filled out as follows:

Block 1 - A/C BU/SERNO. Enter the BUNO of the aircraft.

Block 2 - T/M/S. Enter the T/M/S of the aircraft.

Block 3 - RPT. CUST. Enter the reporting custodian of the aircraft.

Block 4 - OXY. Indicate total gaseous or liquid oxygen on board. Not applicable to aircraft with an on board oxygen generation system.

Block 5 - FUEL. Indicate grade and quantity of fuel on board.



5.1.1.5.6.8 Acceptance Inspection

5.1.1.5.6.8.1 An acceptance inspection shall be performed when a reporting custodian accepts an ATO aircraft under XRAY Action Codes G and R (Appendix E). Acceptance inspection shall include:

- a. Inventory of all equipment listed in the AIR.
- b. Verification of CADs and PADs.
- c. Configuration verification.
- d. Hydraulic fluid sampling.
- e. Daily inspection.
- f. Aircraft acceptance conditional inspection technical publication requirements (if applicable).
- g. Complete FCF.

**NOTE:** The Wing may waive the FCF requirement for intrawing aircraft acceptance providing all the above requirements are met.

5.1.1.5.6.8.2 Verification of CADs, PADs, and configuration is accomplished by visual external inspection and examination of logs and records. Disassembly beyond daily inspection requirements of applicable PMS publications is not required.

**NOTES:** 1. Configuration verification includes CAGE, part number, and serial number verification of all components and assemblies installed on the aircraft that have an AESR, ASR, EHR, MSR, SRC Card, Parachute Record, SSK Record, or Aircrew Systems Record.

2. A} The JSF delivery procedure eliminates the requirement for configuration verification during acceptance inspection when received from the factory. Disassembly beyond the daily inspection requirements to perform configuration verification is not authorized without TYCOM approval.

5.1.1.5.6.8.3 Reporting custodians may elect to increase the depth of acceptance inspection if equipment condition, visual external inspection, or examination of logs and records indicate such action is warranted.

5.1.1.5.6.8.4 Administrative requirements of aircraft acceptance shall include:

- a. Submission of XRAY and DECKPLATE ETR(s).
- b. Electronic receipt of aircraft and associated ALSS equipment in the VFS CADPAD, TRACE CADPAD, and TRACE LIFE SUPPORT Modules.
- c. Verification of the Monthly Flight Summary (OPNAV 4790/21A) by calculating cumulative FLYING HOURS in PERIOD and SINCE NEW blocks/fields.
- d. Verification of the Equipment Operating Record (OPVAV 4790/31A) by calculating cumulative OPERATING HRS ACCUM blocks/fields.
- e. Submission of the appropriate MAF/WO for Gain. (Not required for NTCSS Optimized OMA NALCOMIS activities.)

5.1.1.5.6.8.5 Operating units that transfer aircraft between homeguard and detachments are not required to perform an acceptance inspection or FCF. Administrative requirements listed in [paragraph 5.1.1.5.6.8.4](#) are required.

5.1.1.5.6.8.6 Operating units that accept a short-term transfer aircraft are not required to perform an acceptance inspection or FCF. Administrative requirements listed in [paragraph 5.1.1.5.6.8.4](#) are required.

- c. From any activity to storage.
- d. From a Navy or commercial activity after rework.

5.1.1.5.7.2 Operating activities having physical custody of the aircraft to be ferried shall ensure minimum requirements for a safely flyable aircraft are in agreement with planned mission requirements, distance and duration, and the specific aircraft NATOPS manual. All aircraft will be properly equipped per OPNAVINST 3710.7 and mobility criteria set forth in the MESM **R** (provided on [COMNAVAIRFOR's web portal](#)). In addition, aircraft to be ferried shall be within W&B limitations. Ensure all special and conditional inspections and the applicable portions of the appropriate MRCs, which are due or might reasonably be expected to fall due during the ferry mission, are completed or waived by this instruction prior to starting the mission. A logbook entry certifying compliance with the above provisions shall be made in the inspection section of the logbook under "Conditional Inspections". State the type of inspection, for example, aircraft ferry inspection; authority is "COMNAVAIRFORINST 4790.2". Waivers shall be logged on the Miscellaneous/History page of the logbook.

5.1.1.5.7.3 Ensure the inventory procedures are completed.

5.1.1.5.7.4 In addition to the above requirements, the handbook of W&B data, corresponding computer, and a current NATOPS manual will be aboard the aircraft. The logbook and records shall be current, accurate, and closed out. Activities with NTCSS Optimized OMA NALCOMIS transfer records using the CM Group explorer. All additional administrative records required for transfer of naval aircraft shall be per [paragraph 5.2.1](#).

5.1.1.5.7.5 Ten days advance notice, via naval message, is required prior to sending an aircraft to the AMARC for storage. The message will be addressed to AMARC Davis Monthan AFB AZ, info COMNAVAIRSYSCOM DET FSO Tucson AZ and COMNAVAIRSYSCOM Patuxent River MD.

#### **5.1.1.6 Engine Inspection Procedures and Responsibilities**

5.1.1.6.1 General. Engine inspections shall be accomplished using the applicable MRCs upon expiration of the established interval. Engine inspections may be performed independently of, or concurrently with, any airframe inspection. Unless otherwise indicated by the PMIC, a plus or minus 10 percent of the engine inspection interval is allowed for scheduling purposes.

**NOTES: 1. The plus 10 percent extension is not authorized for LCF limited items which have accumulated their assigned cycles or operating hours. The 10 percent extension is not authorized for structural life limited components (listed in NAVAIRINST 13120.1, NAVAIRINST 13130.1, and applicable PMICs) that have reached their basic life limitations or would reach those limitations during the extension.**

**2. Operational commanders are authorized to defer scheduled maintenance of otherwise functional equipment, including replacement of high time components. This authority is effective only during combat, and shall not be delegated below the CO of the ship or airwing commander as appropriate. ACC/TYCOM notification is not required except in the case of high time components which will be reported to the ACC/TYCOM by priority message when installed components are at or beyond high time, to include the following information: T/M/S, BUNO, NOMEN, PN, and REQ NR STATUS. This authority is not to be applied to LCF or structural life limited items (those items whose disposition is "RETIRE" in the PMIC). Scheduled maintenance deferred at the local operational commander level should not exceed one interval of that maintenance event. As soon as operations permit, deferred maintenance actions must be brought current. Authorization for further deferral should be referred to the ACC/TYCOM.**

Supply activities shall strictly enforce the one-for-one exchange of repairables using the CRIPL to identify the authorized exceptions.

5.1.3.4.2 All defective repairable components shall be wrapped using a cushioning material, cellular plastic film (bubble wrap) PPP-C-795, class 1 or class 2, for short term protection of equipment from handling and shock when the component is turned in to Supply. Refer to [Chapter 10](#), paragraph 10.21, for packaging, handling, and storage requirements of ESDS components.

5.1.3.4.3 For an ASR, EHR, or SRC R} tracked component, ensure the appropriate ASR, EHR, or SRC card is enclosed in a plastic envelope and attached to the component and a photocopy is enclosed in a plastic envelope and is securely attached to the outside of the shipping container. Activities with NTCSS Optimized OMA NALCOMIS will ensure CM ALS are transferred to the receiving activity.

5.1.3.4.4 Under no circumstances shall spare repairable components of any type, RFI or non-RFI, be allowed to be held in any activity, unless authorized by higher authority.

5.1.3.4.5 For defective material awaiting EI or PQDR disposition, refer to [Chapter 10](#), paragraph 10.9.

5.1.3.4.6 Embarked Air Detachments. Embarked air detachments will turn-in non-RFI repairables to the host air capable ship for retrograde shipment to the supporting shore site POE.

5.1.3.4.6.1 Air detachments will ensure applicable component history records, SRC cards, or other history documents are turned in with the non-RFI components and the turn-in MAF or WO cites the same document number used to requisition the RFI replacement.

5.1.3.4.6.2 Maintenance personnel shall maximize use of reusable R} shipping containers to protect the non-RFI component before turn-in to Supply.

#### **5.1.3.5 Repairables Management**

5.1.3.5.1 Control of Components Processed by the IMA. All components inducted by the IMA are processed per procedures in [Chapter 9](#). When work on components in the IMA must be delayed due to an AWP status, the component is turned in to the AWP unit of the CCS. When work on a component is completed, return the component to Material Control for processing. Material Control shall:

- a. Receive the component and documentation from the work center. Ensure MAF/HCN indicate the action taken.
- b. Determine if the component is ASR, EHR, or SRC card trackable and that the appropriate ASR, EHR, or SRC card is with the component before forwarding it to the work center.
- c. Notify ASD the component is ready for pickup.
- d. Obtain ASD signature of receipt on MAF/HCN.
- e. Turn in the component, MAF/HCN, logs, records, or CM ALS and condition tag to ASD.
- f. Forward MAF/HCN to QA via Production Control.

#### **5.1.3.5.2 Preservation, Packaging, and Handling.**

5.1.3.5.2.1 All aeronautical material, regardless of its status, RFI or non-RFI, shall be preserved, packaged, and handled by Supply and Maintenance personnel in such a manner as to prevent damage or deterioration. NAVSUP Publication 700 provides preservation and packaging requirements for specific repairable

components inducted. IMA may combine SSU, DCU, and AMSU, as long as specific ownership is identified.

5.1.3.8.1.1 Receive check, test, and repair components from the CCS (RMS for the Marine Corps). Ensure all documentation, for example, logs, records, MAFs, and WOs, is attached to the component. Activities with NTCSS Optimized OMA NALCOMIS ensure the CM ALS is received with the components.

**NOTE:** In cases where FLRs are SM&R coded PAOOO, those items will be processed through AMSU for disposition.

5.1.3.8.1.2 Identify components and determine whether they are within the check, test, and repair capability of IMA using the standard ICRL. When check, test, or repair capability does not exist, components shall be shipped to the designated support point or DRP (via the ATAC Program) within two working days after screening.

**NOTE:** In cases where a component inducted has a When Discovered Code Y, AMSU shall notify QA and Production Control. AMSU shall complete section C of the Y-Code Process Form (Chapter 7). AMSU shall process the component after QA assigns a report number and completes section B of the Y-Code Process Form. The Y-Code Process Form shall be routed with the component during the repair process.

5.1.3.8.1.3 Notify Production Control of the receipt of components for scheduling into the appropriate work center.

5.1.3.8.1.4 Receive notice from Production Control when components are to be scheduled for induction.

5.1.3.8.1.5 Route components to the Work Center.

5.1.3.8.2 The AMSU shall ensure the ASR, EHR, or SRC card is packaged properly to prevent loss or damage. Activities with NTCSS Optimized NALCOMIS move the CM ALS to the receiving activity. When components are shipped between activities, the following procedures shall be followed:

aA. A} Photocopy the ASR, EHR, or SRC card and place it in a plastic envelope and securely attach it to the outside of the shipping container.

**NOTE:** A} The photocopy of the ASR, EHR, or SRC card may be used to reconstruct a new card in the case of a lost or mutilated card per paragraphs 5.2.1.28.1.4, 5.2.1.29.1.8, and 5.2.1.30.1.4.

a. Insert and seal the ASR, EHR, or SRC card in a plastic envelope. Shipping documents and MAFs will not be placed in the same envelope. Activities with NTCSS Optimized NALCOMIS move the CM ALS to the receiving activity.

b. Attach the R} plastic envelope directly to the component and put both items inside the shipping container.

c. If the component must be shipped in an open crate or without a container, R} a photocopy is not required; however, special attention shall be given to ensure the envelope containing the ASR, EHR, or SRC card is securely attached to the component.

#### 5.1.3.9 Aircraft Maintenance Material Readiness List (AMMRL) Program

AMMRL is the title of the overall program which provides the data required for the effective management of SE at all levels of aircraft maintenance. The program also provides data for the management of automatic test equipment related operational test program sets. Refer to Chapter 3 for more information.

#### 5.1.3.10 Warranty Program

Warranted items will be repaired at the maintenance level which would normally repair such items as determined by the logistics support analysis process if they were not under warranty. For additional specific information concerning this program, refer to Chapters 3 and 15 for documentation.

## 5.2 Aircraft Logbook (Paper), Reports, and Configuration Management (CM) Auto Log-sets (ALSSs)

### 5.2.1 Aircraft Logbook

#### 5.2.1.1 Logbook Clerk

**NOTE:** Activities with NTCSS Optimized OMA NALCOMIS refer to [paragraph 5.2.2](#) for guidance/policy.

5.2.1.1.1 Most functions of maintaining the logbook/records are performed by the Logbook Clerk assigned to Maintenance/Production Control, naval interservice, or commercial contractor FRCs. It is imperative that personnel assigned to Logs and Records have a good foundation in these processes. Prior to any major deployment, all personnel assigned to Logs and Records shall complete the Aviation Maintenance Logs and Records course (Course D/E-555-0039). OMA NALCOMIS Optimized squadrons, IMAs and MALS Logs and Records personnel, shall complete the Configuration Management course (Course D/E-555-0048).

5.2.1.1.2 The Logbook Clerk performs functions and has responsibilities within the following areas:

a. Administrative Records Required for Transfer of Naval Aircraft. The Logbook Clerk shall receive or compile the following items for receipt or transfer of aircraft, including relocation of aircraft to or from a D-level facility for standard rework. The minimum requirements for records and administrative information for aircraft being transferred or inducted and returned from standard rework are as follows:

(1) The logbook, records, and applicable parachute records, SSK records, and aircrew systems records for aircraft mounted components.

(2) AIRs.

(3) W&B Handbook.

(4) Current contents of the ADB.

(5) Current contents of the aircraft inspection, TD compliance, aircraft general, or electronic history files and NALCOMIS OMA ad hoc Aircraft Transfer Report.

**NOTE:** When an NALCOMIS OMA (Legacy) activity transfers an aircraft to an NTCSS Optimized OMA NALCOMIS activity or non-NALCOMIS activity, the transferring Legacy activity shall produce a NALCOMIS OMA ad hoc Aircraft Transfer Report ([Figure 5-13](#)) and send it to the receiving activity. Refer to the OMA-SAM for specific procedures when transferring an aircraft to another NALCOMIS OMA (Legacy) activity. Refer to [paragraph 5.2.3](#) for NTCSS Optimized OMA NALCOMIS policy.

(6) Updated TDSA Lists Nos. 02 and 04 (aircraft only).

(7) Records of all FCFs for preceding 6 months or one phase cycle, whichever is greater.

(8) D1.

(9) Previous and current Hydraulic Contamination Control Trend Analysis Charts.

(10) A facsimile of the current Flight Loads/Launch/Landing Data (NAVAIR 13920/1).

(11) Other specific information required by the ACC/TYCOM. All military and commercial rework activities will forward the complete set of aircraft maintenance files that accompanied the aircraft into standard rework when the aircraft is transferred upon completion of standard rework. In addition, when aircraft are at the D-level facility the ISSC may elect to make copies of the records for historical record analysis.

(12) Required ADRs and preaddressed envelopes will be placed in the logbook for the reporting activity by the rework facility when the aircraft is returned from standard rework.

(13) If operating NALCOMIS OMA, provide aircraft historical data tape.

(14) NALCOMIS Engine Configuration. Ensures all engine configuration base line requirements are entered into NALCOMIS as part of the engine induction process.

(15) Update the custody section of the VFS CADPAD, TRACE CADPAD Module to electronically transfer the installed explosive devices on the aircraft and egress systems.

(16) On transfer of an aircraft, update the custody section of VFS CADPAD, TRACE CADPAD and TRACE LIFE SUPPORT Modules to electronically transfer the associated ALSS equipment and installed explosive devices data on the aircraft and egress systems to the receiving command.

**NOTE: Aircraft undergoing D-level rework/modification shall remain in the reporting custody of the operating activity throughout the rework evolution, regardless of location, unless otherwise directed by ACC/TYCOM.**

b. W&B Handbook. The Logbook Clerk will forward the aircraft W&B Handbook to the W&B Officer.

c. AIRs. The Logbook Clerk at the O-level will forward the AIRs to Material Control. The D-level Logbook Clerk will forward the AIRs to management services.

d. Inventory of Components and Assemblies (O-level). Prepare a local form containing a list of all items that have an AESR, ASR, EHR, MSR, SRC Card, Parachute Record, SSK Record, or Aircrew Systems Records for aircraft installed components. Use this form with a column provided for recording the serial number of the installed item to inventory the aircraft. Verify the inventoried item serial numbers with the actual serial numbers in the logbook and records. Resolve any discrepancies. Items will be inventoried during the phase inspection for the applicable equipment being inspected. At the completion of one complete phase cycle all items shall have been inventoried. If operating NALCOMIS OMA, use applicable NALCOMIS reports for obtaining and verifying inventory of components and assemblies.

**NOTE: A} The JSF delivery procedure eliminates the requirement for configuration verification during acceptance inspection when received from the factory. Disassembly beyond the daily inspection requirements to perform component verification is not authorized without TYCOM approval.**

e. Compass Calibration. The Logbook Clerk will maintain both the most current calibration and verification compass correction cards in the manila envelope in the back of the logbook, make Miscellaneous/History page entries as required, and maintain due dates. [Paragraph 5.2.1.17.1.4](#) contains additional information.

f. Engine Transaction Report and End of Quarter Engine Report. Activities with reportable engines refer to NAVAIRINST 13700.15 for reporting procedures.

g. Aircraft Accounting, OPNAV XRAY Reporting, and Quarterly Aircraft Audit Reports. The Logbook Clerk will perform the functions and be responsible for aircraft reporting as required by [paragraph 5.3](#) and applicable ACC instructions.



#### 5.2.1.7 Dates

A standardized date entry of YYMMDD will be used on all logbooks, ALSS, and supplemental forms. When a date entry is required and the only date available is year and month, enter the last day of the month for the DD portion of the date entry.

#### 5.2.1.8 Shipping Information

5.2.1.8.1 When equipment/components are shipped between activities, the following procedures shall be followed to reduce the possibility of loss or damage to logbook/records:

- a. Handle the **R} AESR** properly to prevent damage or loss.
- b. Bind the AESR with a two prong fastener when not installed in a logbook.

bA. A} Photocopy the ASR, EHR, or SRC card and place it in a plastic envelope and securely attach it to the outside of the shipping container.

c. Insert and seal the AESR, MSR, ASR, EHR, or SRC card in a plastic envelope. Shipping documents and MAFs will not be placed in the same envelope with the record or card.

**NOTE:** A} The photocopy of the ASR, EHR, or SRC card may be used to reconstruct a new card in the case of a lost or mutilated card per paragraphs 5.2.1.28.1.4, 5.2.1.29.1.8, and 5.2.1.30.1.4.

5.2.1.8.2 When shipment of the equipment or component is in a box or container, attach the plastic envelope to the equipment or component prior to packaging for shipment. If the shipping container has a special holder for records, for example, engine containers, place the plastic envelope in the special holder.

5.2.1.8.3 When shipment is in an open crate or without a container, firmly attach the plastic envelope to the equipment or component. The AESR, MSR, ASR, EHR, or SRC card will not be removed by anyone except the intended shipment recipient.

#### 5.2.1.9 Disposition

5.2.1.9.1 Logbook/records for aircraft/equipment stricken from the Navy inventory are disposed of as follows:

a. Destroyed Aircraft/Equipment. The logbook/records are disposed of locally after necessary investigation and preparation of required reports, provided the aircraft/equipment is not sold, transferred, or is a special category aircraft/equipment.

b. Sale or Transfer. When an aircraft/equipment is sold or transferred to other than Navy custody, the logbook/records accompany the aircraft/equipment unless otherwise directed by the ACC/TYCOM. Classified information is removed from the logbook/records or cleared for release through the chain of command prior to transfer or sale.

c. Special Categories. The following logbook/records are transferred to the Washington National Records Center, Washington, DC:

- (1) Logbook/records for experimental aircraft/equipment.
- (2) Logbook/records considered of historical value.
- (3) Logbook/records of aircraft/equipment lost in combat or that have been involved in a mishap resulting in death, missing in action, personal injury, or substantial damage to other than government property are retained by the operating activity for one year (for defense in cases of litigation action) and then forwarded to the Washington National Records Center.

**NOTE:** Refer to SECNAV M-5210.1 for procedures for transferring records to the Washington National Records Center. SECNAVINST 5510.30 provides guidance for shipping classified information to the Washington National Records Center.

5.2.1.9.2 The logbook binder is not destroyed unless it is unserviceable. Serviceable binders are forwarded to: COMMANDING OFFICER, FLEET AND INDUSTRIAL SUPPLY CENTER, NORFOLK VA 23512-5000.

5.2.1.9.3 Information for obtaining logbook binders, forms, and other records is listed in Appendix B.

#### **5.2.1.10 Reconstruction**

5.2.1.10.1 In the event an aircraft logbook is lost, destroyed, or damaged, every effort shall be made to reconstruct the logbook.

5.2.1.10.2 The following sources of information will be helpful in reconstructing a logbook:

- a. File of completed MAFs (aircraft inspection and general files).
- b. **D}**\_\_\_\_\_.
- c. Contents of the ADB.
- d. Lists Nos. 02 and 04 obtained from COMNAVAIRSYSCOM (AIR-6.8.5.2).
- e. MSR, ASR, and SRC card information obtained from the CMIS Repository at COMNAVAIR-SYSCOM (AIR-6.8.4.3).
- f. EHR information obtained from the applicable ISSC.
- g. File of XRAY and ETRs.
- h. Records maintained by the ISSC and rework activity.
- i. Aircraft manufacturer.
- j. Other available data sources, such as NALDA (Deckplate) and NALCOMIS OMA

#### **5.2.1.11 Logbook Forms and Records**

Logbooks and records are an integral part of aviation maintenance. They are the administrative means of providing managers with aircraft/equipment age, status, modification, configuration, and historical data to plan, maintain, and operate aircraft and equipment. Properly maintained logbook/records are critical to aviation maintenance and safety.

#### **5.2.1.12 Structural Life Limits (OPNAV 4790/142)**

5.2.1.12.1 General Information. This form, [Figure 5-15](#), is used to monitor structural life limited components designated for D-level replacement which do not require SRC or ASR documentation. In addition, this form also provides a means for documenting basic life limitations, for example, maximum flight hours, catapults, arrestments, and landings, which must be properly managed to ensure safety and structural integrity throughout the service life of each T/M/S aircraft. NAVAIRINST 13120.1 and NAVAIRINST 13130.1 provide policy for management of this program and also serve as a reference for D-level activities when updating PMICs. Aircraft shall not exceed structural life limits specified in



**CHAPTER 6**  
**Production Divisions; Work Center Supervisor; Maintenance Training; and**  
**Training, Special Process Certification and Licensing**

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6.1.1.3.5.3 Personnel in the ALSS Branch will be qualified per the R} Explosives Handling Personnel Qualification and Certification Program established in OPNAVINST 8023.24/MCO 8023.3.

6.1.1.3.5.4 A NAR is not an authorized medium for directing or authorizing the removal/replacement of aircraft or ALSS installed cartridges, pyrotechnics, CADs, or PADs. The TD system was established for that purpose. If, within 3 days of receipt of a NAR (affecting the equipment described above), a TD has not been received, the reporting custodian will request assistance from the ACC/TYCOM who in turn will request status from COMNAVAIRSYSCOM.

6.1.1.3.6 Cannibalization of egress system components must be held to an absolute minimum. Proper functioning of egress systems is critical and the interchanging of egress system components increases the possibility of maintenance error and exposes maintenance personnel to unnecessary, unscheduled maintenance on hazardous material.

6.1.1.3.6.1 Personnel parachutes and survival kits require stringent management to ensure aircraft/systems components/special inspection compatibility. Returning cannibalized components to the original aircraft will increase aircraft readiness, decrease the possibility of logbook record error, and ensure aircraft/system/special inspection compatibility is maintained. Returning egress system components to the original aircraft/egress system must be documented on a MAF or WO.

6.1.1.3.6.2 Egress system related cartridges/CADs/PADs will not be cannibalized without prior cognizant Wing (ashore) or CVW (afloat) approval.

6.1.1.3.6.3 Some egress systems require special adjustments when ejection seats are installed in a different aircraft and damage may result from excessive handling or repeated removal and installation. Ejection seat rework is tied to aircraft rework, therefore, cannibalization of seats could cause a seat to serve more than one tour without being reworked. For these reasons, ejection seats will not be cannibalized without prior approval by the cognizant Wing (ashore) or CVW (afloat).

6.1.1.3.7 Documentation. Standardized aviation 3M documentation throughout the Navy/Marine Corps will increase the accuracy of maintenance data reporting; thereby, producing a higher percentage of reliable maintenance data. The importance of accurate documentation cannot be overemphasized.

**NOTES: 1. OMA NALCOMIS Optimized squadrons shall have one AZ, one PR, and one AME (if applicable) complete the ALSS Configuration Management course (D/E-555-0056).**

**2. OMA NALCOMIS Optimized squadrons that operate from a detachment based concept for 90 days or longer periods of time shall have one AZ and one PR complete the ALSS Configuration Management course (D/E-555-0056) prior to detachment.**

6.1.1.3.7.1 Provisions have been made to identify individual aircrew member's equipment through the complete special inspection.

6.1.1.3.7.2 An example of proper documentation for conducting a special inspection on personal survival equipment follows:

Block A22. Enter the WUC for a special inspection, for example, 030000G

Block A52. Enter the aircrew member identification number, for example, GF9341.

Block A32. Enter Transaction Code 11, for on equipment work.

Block A35. Enter Action Taken Code 0.

6.1.1.3.7.3 An example of proper documentation for a discrepancy discovered during a special inspection of aircrew member's personal equipment follows:

Block A22. Enter the WUC for the survival vest, for example, 96A32.

Block A32. Enter Transaction Code 12 if failed parts are documented.

Block A52. Enter the aircrew member's identification number, for example, GF9341.

Block A58. Enter the discrepancy discovered during a special inspection, Code L.

6.1.1.3.8 Tool control within the ALSS Branch is unique. In addition to policy set forth in [Chapter 10](#), paragraph 10.12.1 all tools must be accounted for after the repack and inspection of each item, for example, parachutes and flotation equipment. These items cannot be functionally checked prior to use.

6.1.1.3.9 Maintenance will be conducted using the applicable technical manuals.

6.1.1.3.10 A qualified PR is defined as a graduate of the Navy PR "A" School.

6.1.1.3.11 A qualified AME is defined as a graduate of the Navy AME "A" School and CENNAVAVNTECHTRAU for specific T/M/S egress systems.

6.1.1.3.12 Certified PRs/AMEs are defined as personnel who have been qualified under the Explosive Handling Personnel Qualification and Certification Program.

6.1.1.3.13 Activities having no or only one PR assigned shall designate in writing a properly cross trained QAR or CDQAR to inspect work performed on ALSS equipment maintained by Work Center 13A. This does not include parachute or life raft/life preserver packing/repacking or other I-level maintenance functions on ALSS equipment. Cross trained QARs/CDQARs shall use NAVAIR 13-1-6 series manuals for technical guidance. Personnel performing ALSS equipment maintenance and QARs/CDQARs inspecting work performed shall be ordnance certified per R} OPNAVINST 8023.24/MCO 8023.3.

6.1.1.3.14 Activities consistently operating under the detachment/homeguard concept with no PR assigned to the detachment shall designate one additional cross trained person to perform O-level maintenance on assigned ALSS equipment. Training shall be provided by a senior (E-5 or above) PR assigned to the parent squadron or the supporting IMA/FRC and shall be limited in scope and content. The parent MO shall sign a designation letter specifically identifying the T/M/S aircraft or equipment involved and specific functions authorized.

**NOTE: Use of personnel not qualified, certified to perform maintenance on egress systems is NOT AUTHORIZED.**

6.1.1.3.15 O-level activities supported by contract maintenance shall use only qualified, certified civilian personnel to perform O-level maintenance on ALSS/egress system maintenance.

6.1.1.3.15.1 For Work Center 13A, only personnel who are graduates of Navy PR or equivalent Air Force or Army MOS course shall be allowed to perform ALSS system maintenance.

6.1.1.3.15.2 For Work Center 13B, only personnel who are graduates of Navy AME "A" School and CENNAVAVNTECHTRAU for specific T/M/S or T/M/S factory equivalent training course shall be allowed to perform egress system maintenance.

6.1.2.1.11 Deviations.

6.1.2.1.11.1 In the event appropriate equipment or facilities are not available or accessible, or aircraft condition (IMC/P, PDM, or SDLM) precludes compliance with the scheduled calibration intervals, a request for deviation shall be made to the Type Wing or CGMAW and info the ACC/TYCOM via naval message prior to the scheduled calibration due date. Squadrons/units assigned to a CVW or Marine Expeditionary Unit will send the request to their parent TYPEWING or CGMAW and info the ACC/TYCOM via naval message prior to the scheduled calibration due date.

6.1.2.1.11.2 Prior to reporting activity's request for deviation, aircraft condition permitting, an airborne/ground bearing comparison check shall be accomplished using a known good reference system (Inertial Navigation System, Tactical Navigation, ground control radar, or Automatic Directional Finder) against the aircraft compass system. The comparison check certifies only apparent operation of the magnetic compass system in question and shall be substituted only until such time as either the preferred or alternate method of calibration/verification can be accomplished.

6.1.2.1.11.3 When requesting a deviation, provide the following information:

- a. Aircraft T/M/S.
- b. BUNO.
- c. Date calibration/verification due.
- d. Reason (unit deployed afloat, facilities or equipment not available).
- e. Length of request.
- f. Method of bearing comparison check and results.

6.1.2.1.12 Documentation of unscheduled and scheduled calibration/verification.

6.1.2.1.12.1 Compass calibration/verification subsequent to a noted discrepancy will be documented on the same MAF or WO requiring correction of a reported discrepancy. These maintenance actions are defined in [Chapter 15](#).

6.1.2.1.12.2 Aircraft Logbook/ALS. Calibration shall be documented in the Miscellaneous History Section (OPNAV 4790/25A) of the aircraft logbook.

6.1.2.1.13 The aircraft logbook or CM ALS shall be inspected to ensure currency of compass calibration upon receipt of the aircraft.

**6.1.2.2 Armament Programs**

Due to the length and complexity of instructions pertaining to armament programs, the following lists only pertinent instructions on applicable programs:

- a. OPNAVINST 8020.14.
- b. NAVMEDCOMINST 6470.2 and OPNAVINST 5100.27/MCO 5104.1.
- c. NAVSEA SW020-AF-HBK-010.
- d. OPNAVINST 8000.16.
- e. A} OPNAVINST 8023.24.
- f. A} MCO 8023.3.

6.4.2.7 All departments shall provide assistance in the development and implementation of program requirements per this chapter.

#### **6.4.3 Explosives Handling Personnel Qualification and Certification Program**

6.4.3.1 The Quality Organization will monitor the Explosives Handling Personnel Qualification and Certification Program as established in R} OPNAVINST 8023.24/MCO 8023.3.

6.4.3.2 Storing and Handling Uninstalled Egress Systems and Explosive Devices. The storage of removed cartridges, CADs, and PADs must be accomplished per NAVAIR 11-100-1.1-CD.

6.4.3.2.1 Egress/explosive system devices which are not to be installed in the aircraft for a period of time will be stored in a secure area.

6.4.3.2.2 Egress/explosive system devices involved in mishaps will be rendered safe and disposed of by Explosive Ordnance Disposal personnel only. This shall be done only after the mandatory investigation required by OPNAVINST 3750.6.

6.4.3.2.3 Ejection seats and escape system components are structurally and functionally designed for one time use only. Ejection seats/escape system components that have been ejected/fired regardless of apparent condition shall be scrapped per current regulations after release by the Aircraft Mishap Board.

#### **6.4.4 Welding Training Program**

6.4.4.1 FRCs shall provide welding training, examinations, and qualification for welders per NAVAIR 01-1A-34 and as identified in the CANTRAC. Welding certification/recertification training is provided by qualified, certified instructors. Examination will be performed by designated personnel.

6.4.4.2 Minimum qualification for a welding instructor to provide training qualification/requalification for welding personnel are:

- a. Must be fully qualified in all elements of the welding trade to include experience as a welder in excess of the minimum required of a journeyman level welder.
- b. Must be certified to perform, and have the ability to meet recertification requirements in all welding processes for which instruction is provided, on all metals specified NAVAIR 01-1A-34.
- c. Must have a thorough knowledge of aircraft and maintenance welding skills and processes.

6.4.4.3 Each FRC shall have a written procedure defining qualification requirements and certification/recertification procedures for establishing welding personnel and welding instructors. This procedure shall be consistent with NAVAIR 01-1A-34.

#### **6.4.5 Aircraft Turnup, Taxi, and Rotor Engagement**

6.4.5.1 Aircraft rework is dependent upon various ground checks to determine air worthiness prior to flight. Only qualified employees/military personnel shall be authorized to perform functional checks that require taxi, turnup, or rotor engagement.

6.4.5.2 Employees/military personnel shall be licensed and designated in writing by the CO for engine turnup, taxi, or rotor engagement. Those employees shall be thoroughly familiar with and demonstrate a knowledge and practical proficiency of:

- a. Applicable portions of the NATOPS Manual.

**CHAPTER 7**  
**Quality Assurance (QA) Division and Quality Programs**

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- e. Participate in the activity's safety surveys and stand downs.

**NOTE: When the QA Supervisor is unavailable, the senior QAR/CDQAR in OMDs, certain other activities, and detachments with four or less aircraft will be responsible for Maintenance Department Safety.**

7.1.8.2.3 When a report is required by OPNAVINST 3750.6, QA will collect and provide maintenance and material data necessary for the preparation of required reports. OPNAVINST 3750.6 contains detailed report preparation procedures. The submission of reports required by OPNAVINST 3750.6 does not negate any of the requirements for submission of reports required by the NAMP.

### **7.1.9 Quality Assurance (QA) Auditing**

7.1.9.1 Auditing is an assessment of the effectiveness of programs managed within the Maintenance Department per [Chapter 10](#), paragraph 10.7. The programs included in the NAMPSOP SHALL NOT have additional instructions written below COMNAVAIRSYSCOM level (with the exception of Local Command Procedures ([Appendix D](#))). The NAMPSOP is the controlling instruction for that subject. Programs and processes not covered by a NAMPSOP do not require local command instructions. COs/MOs are responsible for publishing local command procedures per [Appendix D R](#)) or OPNAVINST 5215.17 for FRCs, to clarify geographic area, T/M/S specific, and command specific details not addressed by the NAMPSOP. This section will only add clarification of local procedures and shall in no way supersede any NAMPSOP requirements. Wings shall standardize [Appendix D](#) for all T/M/S specific details. ACC/TYCOM/Wings shall provide instructions on non-NAMPSOP programs and processes in sufficient detail to preclude the requirement for supplemental instructions below their level. It is the responsibility of the ACC/TYCOM/Wing and CO/MO to ensure CSEC is updated to include auditing requirements for these instructions and local command procedures.

7.1.9.2 QA audits the programs listed in the following paragraphs. The Weapons Department needs to audit only those programs peculiar to the Weapons Department.

7.1.9.2.1 NDI Program. QA will:

- a. Ensure assistance is requested, when necessary, from the supporting IMA/FRC for performance of those NDI tasks beyond the activity's capability.
- b. Monitor compliance with NDI personnel qualification, certification and recertification requirements, safety precautions, and instructions.
- c. Ensure assigned NDI technicians/operators are certified.
- d. Monitor the organization's NDI training program to ensure it is current and comprehensive. Special emphasis should be placed on areas of NDI accomplished by other than personnel assigned NEC 7225/MOS 6044, or a civilian/contractor equivalent.

7.1.9.2.2 Explosives Handling Personnel Qualification and Certification Program. QA shall review individual certifications during work center audits to verify personnel who handle explosive devices while performing maintenance functions are qualified and certified per OPNAVINST 8020.14.

7.1.9.2.3 Aeronautical Equipment Welders Program. QA will:

- a. Monitor compliance with welding personnel qualification, certification/recertification requirements, safety precautions, and applicable technical publications and directives.



**CHAPTER 10**  
**Naval Aviation Maintenance Program Standard Operating Procedures**  
**(NAMPSOPs)**

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and efficiency of training, and prioritize training funding requirements by providing measurable standards of proficiency. QPT is designed to ensure maintenance technician proficiency relative to the expectations associated with the technician's pay grade. QPT is part of each enlisted maintenance technician's ongoing training continuum and individuals are encouraged to continually progress towards the next higher QPT certification.

10.1.2.4.1 QPT certification levels and syllabi have been structured to correspond with Navy Sea-Warrior mandated progression of Apprentice, Journeyman and Master to indicate the corresponding skill level to be attained in professional development. QPT syllabus content and qualification timeframes are tailored for each QPT certification level and can be tailored to account for past experience per Type Wing or stand-alone command procedure.

10.1.2.4.2 QPT certification levels and syllabi are as follows:

a. Qualified and Proficient Apprentice (QPA). Generally for E-4 and below personnel, this syllabi includes general and rating specific items addressing flight-line and work place safety, basic aircraft servicing and inspection, SE licensing, basic maintenance documentation/NALCOMIS, minimal rating knowledge (typically limited to the identification and removal of components), the identification, use and handling of hazardous material, and any additional qualifications deemed appropriate for QPA certification. QPA proficiency can be compared to that of a Plane Captain.

b. Qualified and Proficient Journeyman (QPJ). Generally for E-5 and E-6 personnel, this syllabi includes incomplete QPA items for personnel new to the T/M/S, more in-depth technical data specific to the T/M/S aircraft (T/M/S specific PQS), advanced maintenance documentation/NALCOMIS, shop and shift workload management, and any additional qualifications deemed appropriate for QPJ certification. QPJ certified individuals are those generally recommended for CDI qualification.

c. Qualified and Proficient Master (QPM). Generally for E-7 and E-8 personnel, this syllabi includes items appropriate for the efficient and safe management of aircraft maintenance/production and the administration of personnel.

10.1.2.5 MATMEP includes the training associated with all aircraft, Marine Corps maintenance personnel, O-level and FRC aircraft SE maintenance personnel, and other ground aviation support personnel in Occupation Fields 59 and 70. The program primarily addresses productive direct labor on aircraft, aircraft SE, removed components from aircraft, and equipment pertinent to Occupation Fields 59-65, 70, and MOS 6694. In addition, ITSS/MATMEP provides a means for documenting training related to indirect (functional) tasks, such as work center duties, QA, and Maintenance Control, that are essential to the overall performance of the maintenance organization and to the career development of the individual Marine.

10.1.2.6 ASM is an unclassified training management tool that supports AMTCS from the schoolhouse to the fleet. It is a software application designed for AMTCS to identify job task requirements, assist in determining proficiencies, document qualification/certifications, and track completed training and aviation maintenance personnel progress within their respective QPT/MATMEP. ASM will not replace requirements established by R} OPNAVINST 8023.24/MCO 8023.3 for the Explosive Handling Personnel Qualification and Certification Program.

10.1.2.7 MediaTrax is an on-line IMI repository for aviation maintenance IMI courses. The MediaTrax library contains more than 1,200 modules of training that includes, but is not limited to, eleven T/M/S aircraft, Ordnance, I-level Avionics, and SE. The maintenance IST IMI available via MediaTrax is designed to provide remedial and refresher training in a self-paced setting, or it may be used by work center supervisors in a group setting to support unit level technical training. MediaTrax allows the user to browse the courseware repository using several search criteria including T/M/S platform, keywords, and

### 10.3 Navy Oil Analysis Program (NOAP) (NAMPSOP)

#### 10.3.1 Introduction

10.3.1.1 The NOAP establishes policy, responsibilities, and requirements for monitoring equipment condition in an effort to detect impending failures without equipment removal or extensive disassembly.

10.3.1.2 References:

- a. OPNAVINST 4731.1, Joint Oil Analysis Program (JOAP).
- b. NAVAIR 17-15-50.1, Joint Oil Analysis Program Manual, Volume I.
- c. NAVAIR 17-15-50.2, Joint Oil Analysis Program Manual, Volume II.
- d. NAVAIR 17-15-50.3, Joint Oil Analysis Program Manual, Volume III.
- e. NAVAIRINST 4731.1, Navy Oil Analysis Program for Aeronautical Equipment.

#### 10.3.2 Discussion

10.3.2.1 The NOAP provides Navy and Marine Corps aviation activities the guidance necessary to achieve required performance, efficiency, and logistic support by establishing policy for integrated oil analysis requirements. The Navy participates in the JOAP, a combined Navy, Army, and Air Force effort designed to ensure timely and accurate oil analysis support by strategically locating oil analysis laboratories and standardizing procedures and equipment. All aspects of oil servicing, documentation, and trend analysis are critical to flight.

10.3.2.2 The ISSC is the NOAP MANAGEMENT OFFICE, CODE 4.4.6.1, 296 FARRAR RD, PENSACOLA FL 32508-5021, DSN 922-4603 or COMM (850) 452-4603.

10.3.2.3 The JOAP TECHNICAL SUPPORT CENTER, 85 MILLINGTON AVE, PENSACOLA FL 32508-5010, DSN 922-5627 or COMM (850) 452-5627 EXT 101, can provide information regarding correlation, testing standards, and equipment.

10.3.2.4 All letters of designation, qualification, certification, course completion, medical certification, and completed maintenance related PQS shall be filed in the individual's qualification/certification record.

#### 10.3.3 Responsibilities

10.3.3.1 O-level and I-level activities

10.3.3.1.1 The R} MO shall:

- a. Designate, in writing via the MMP/SME listing, the MMCO (O-level) or the Power Plants Division Officer/R} FRC equivalent as the NOAP Manager.
- b. Develop local command procedures (as required) per [Appendix D](#).

10.3.3.2 FRC activities shall:

- a. Develop local command procedures for the Navy Oil Analysis Program (as required) per [Appendix E](#) of this instruction.

## 10.8 Oil Consumption Program (NAMPSOP)

### 10.8.1 Introduction

The Oil Consumption Program establishes policy, responsibilities, and requirements for monitoring aircraft equipment condition in an effort to detect impending failures without equipment removal or extensive disassembly.

**NOTES:** 1. Engines, gearboxes, and transmissions that have specific consumption rates per applicable MIMs/MRCs are required to comply with the requirements of this program. Gearboxes and transmissions that only have established leak limits, such as drops per minute, fall outside the scope of this program.

**2. A} The Oil Consumption Program is optional for aircraft with engines capable of electronic oil consumption monitoring.**

### 10.8.2 Discussion

10.8.2.1 The Oil Consumption Program provides Navy and Marine Corps O-level activities the guidance necessary to achieve required performance, efficiency, and logistic support by establishing policy for integrated oil consumption requirements. All aspects of oil consumption/servicing, documentation, and trend analysis are critical to flight safety.

10.8.2.2 All letters of designation, qualification, certification, course completion, medical certification, and completed maintenance related PQS shall be filed in the individual's qualification/certification record.

### 10.8.3 Responsibilities

#### 10.8.3.1 Wing and O-Level Activities

10.8.3.1.1 The Wings shall:

- a. Develop local command procedures (as required) per [Appendix D](#) to identify the T/M/S, geographic environmental, and local legal peculiarities.
- b. Monitor oil consumption requirements and provide a standardized method for Maintenance Control to ensure oil consumption limits are not exceeded prior to release of aircraft safe for flight.
- c. Develop T/M/S Oil Consumption Program CSEC questions.

10.8.3.1.2 The MO shall:

- a. Designate, in writing via the MMP, the MMCO as the Oil Consumption Program Manager.
- b. Develop local command procedures (as required) per [Appendix D](#).
- c. Coordinate with the NATOPS Officer to ensure all pilots/aircrew are trained in oil consumption documentation procedures while operating away from home base.

10.8.3.1.3 The Program Manager shall:

**NOTE:** Upon designation as Program Manager, a self-audit shall be performed within 30 days and annually thereafter using the CSEC. The most current self-audit shall be retained within the program binder.

- a. Be knowledgeable of applicable MIMs, MRCs, and this instruction.
- b. Provide indoctrination and follow-on training to personnel relating to their Oil Consumption Program responsibilities.
- c. Maintain a program file to include applicable POCs, program related correspondence and message traffic, and applicable references or cross reference locator sheets.



10.8.3.1.7 The Work Center Supervisor shall:

- a. Ensure Oil Consumption Program indoctrination and follow-on training is provided to personnel. Training shall include personnel responsibilities and shall be documented on the NAMP Indoctrination Training sheet (Figure 10.1-5) in the individual's qualification/certification record.
- b. Ensure oil servicing units are maintained free of contamination.
- c. Conduct oil servicing per applicable MIMs/MRCs.

**NOTE:** Servicing personnel shall inform Maintenance Control and document on Engine/Gearbox Oil Consumption Record (Figure 10.8-1) how many ounces of oil were added to aircraft engines/gearboxes.

10.8.3.1.8 Aircrew shall:

- a. Be thoroughly familiar with oil servicing procedures.
- b. Ensure oil consumption rates are calculated and documented on the Engine/Gearbox Oil Consumption Record (Figure 10.8-1) prior to flight.

#### 10.8.3.2 Fleet Readiness Center (FRC)

**NOTE:** A} FRCs are not required to maintain an Oil Consumption Program, but are required to complete safe for flight procedures.

FRCs shall:

- a. Develop local command procedures (as required) per Appendix D D}\_\_\_\_\_.
- b. Monitor oil consumption requirements and provide a standardized method for R} Production Control to ensure oil consumption limits are calculated, not exceeded, and documented prior to releasing aircraft safe for flight.
- c. Ensure all pilots/aircrew are trained in oil consumption documentation procedures while operating away from home base.
- d. Ensure command personnel are knowledgeable of applicable MIMs, MRCs, and this instruction (as appropriate).
- e. Review audit data and other R} related reports (generated within the command) to identify specific areas of concern and to determine steps required for process improvement.
- f. Ensure grade and quantity of oil added to each engine is annotated in block 6 of the Aircraft Inspection and Acceptance Record (OPNAV 4790/141) per this instruction. Block 8 may be used to document gearbox oil, hydraulic fluid quantity, or other aircraft servicing information.
- g. Ensure R} safe for flight certified personnel verify that oil consumption limits have not been exceeded, per applicable MIMs/MRCs, prior to releasing aircraft safe for flight.
- h. Ensure the current Engine/Gearbox Oil Consumption Record (Figure 10.8.1) is retained in the ADB until completed. Completed engine forms shall be placed with the applicable AESR (OPNAV 4790/29) and accompany the aircraft/engine when transferred. Gearbox oil consumption records can be disposed of locally after gearbox transfer. FRCs are authorized to deviate from Figure 10.8-1 format for unit specialization, ensuring required data elements are met.

## **10.9 Naval Aviation Maintenance Discrepancy Reporting Program (NAMDRP) (NAMPSOP)**

### **10.9.1 Introduction**

10.9.1.1 NAMDRP establishes policy, responsibilities, and requirements for reporting substandard workmanship, improper QA procedures, and deficiencies in material and publications.

10.9.1.2 References:

- a. OPNAVINST 3710.7, NATOPS General Flight and Operating Instructions.
- b. OPNAVINST 3750.6, Naval Aviation Safety Program.
- c. OPNAVINST 4410.2, Joint Regulation Governing the Use and Application of Uniform Source Maintenance and Recoverability Codes.
- d. OPNAVINST 5102.1, Mishap Investigation and Reporting.
- e. **D}**
- f. OPNAVINST 8000.16, The Naval Ordnance Maintenance Management Program (NOMMP).
- g. SECNAVINST 4140.2, Management of Aviation Critical Safety Items.
- h. SECNAVINST 4355.18, Reporting of Supply Discrepancies
- i. SECNAVINST 4855.3, Product Data Reporting and Evaluation Program (PDREP).
- j. NAVAIRINST 4700.22, Policy for Managing Lead Maintenance Technology Centers.
- k. NAVAIRINST 5100.11, Research and Engineering Technical Review of Risk Process and Procedures for Processing Grounding Bulletins.
- l. NAVSUPINST 4423.29, Navy Uniform Source, Maintenance and Recoverability (SMR) Codes.
- m. NAVAIRINST 5216.11, Red Stripe Memorandum System.
- n. DOD 4500.9-R, The Defense Transportation Regulation, Part II - Cargo Movement.
- o. NAVSUP Publication 485, Afloat Supply Procedures.
- p. NAVSUP Publication 719, Guide for Assignment, Application and Use of Source Maintenance and Recoverability Codes.
- q. NAVSUP Publication 723, Navy Inventory Integrity Procedures.

### **10.9.2 Discussion**

10.9.2.1 Safety shall be the primary consideration when submitting reports. All hands are charged with the responsibility of reporting deficiencies, defects, and discrepancies which could adversely affect safety of operations. Mishaps can be prevented by making others aware of hazards.

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<u>Program Manager</u>	<u>In-Service Support Center</u>	<u>Equipment Supported</u>
PMA-187	NAV ISSC	Navigation Systems, GPS
PMA-201	CSW ISSC	Conventional Strike Weapons, JDAM, JSOW
	CAD ISSC	Explosive Cartridges, CADs, PADs, Rockets, JATO, NACES Thermal Batteries
	AAE ISSC	Bomb Racks, Aircraft Missile Launchers
PMA-202	AECS ISSC	Aircrew Escape and Crashworthy Systems (AECS), GRU-EA7, SJU-5/6, SJU-4/13/14, NACES Ejection Seats, Parachute Systems, Fixed/Rotary Wing
		Crashworthy Systems, Crashworthy Seating Systems
	AOS ISSC	Aircrew Oxygen System (AOS), LOX Converters, O2 Regulators, O2 cylinders, O2 Hoses, OBOGS, OBOGS Support Equipment, Smoke Masks, Emergency O2
		Systems (including seat pan emergency O2), Portable Fire Extinguishers
	LSS ISSC	Life Support Systems (LSS), Survival Equipment, Bail Out Parachutes, Radio/Survival Electronics
	NVS ISSC	Night Visions Systems (NVS), AN/AVS-9, SNVS
	CB ISSC	Chemical Biological (CB) Aircrew Protective Chemical Biological Equipment
PMA-205	TS ISSC	Aviation Training Equipment/Devices
PMA-207	CA ISSC	Commercially Supported Aircraft/Engines. TC-4C, C-9B, C-12, C-20, C-26, UC-35, C-37, CT-39G, T-39N, C-40, DC-130, C-130J, MD-369, T-34C, T-44A, TH-6B, TH-57, JT8D, PT6A, JT12, MK511, MK5298X, MK611, T56-A-9, 250-20N, AE2100D3
PMA-208	TRGT ISSC	Aerial Targets and Decoys Systems
PMA-209	ACE ISSC	Air Combat Electronics (ACE), ARC-182, ARC-210, AYK-14, APX-100, GPWS
	ACE/OOP ISSC	Out of Production ACE Systems
PMA-213	ATC/LS ISSC	Air Traffic Control and Landing Systems
PMA-225	WWMM ISSC	Worldwide Multi-Mission Systems, AGM-65, AGM-88, AGM-114, BGM-71
PMA-226	H-46 ISSC	H-46, T58
	F-4 ISSC	QF-4,
PMA-231	E-2/C-2 ISSC	E-2/C-2, ATDS
PMA-233	MPS ISSC	Mission Planning Systems, JMPS, TAMPS
PMA-234	EA-6B ISSC	EA-6B, J52-P-408
PMA-241	F-14 ISSC	F-14, F110, TF30-P-414A
		Photographic Systems
PMA-242	DSS ISSC	Defense Suppression Systems, AGM-65, AGM-88, AGM-114, BGM-71
PMA-248	TTR ISSC	Tactical Training Range Systems, KGV-23, JTCTS, LATR, TACTS
PMA-251	ALRE ISSC	Aircraft Catapults and Arresting Gear, Helicopter Landing Systems, Visual and Optical Landing Aids, Shipboard Aviation Data Management Systems, Wind Measuring Systems, Shipboard Aviation Marking and Lighting, USMC Expeditionary Airfield Equipment, Afloat Navy Aircraft Fire-Fighting Equipment
PMA-257	AV-8 ISSC	AV-8B, TAV-8B, F402
PMA-258	SOAD ISSC	Standoff Missile Systems, AGM-84, AGM-119
PMA-259	AAW ISSC	Air to Air Weapons, AIM-7, AIM-9
PMA-260	SE ISSC	Aviation Common Support Equipment, CASS
PMA-261	H-53 ISSC	CH-53, MH-53, T64
	EXHELO ISSC	VH-60, VH-3
PMA-263	UAV ISSC	Unmanned Aerial Vehicles (UAV). Pioneer, Predator, VTUAV, JTUAV
PMA-264	ASW ISSC	Air ASW Systems, Sonobouy, Sensors, GASS
PMA-265	F/A-18 ISSC	F/A-18, F404, F414
PMA-271	ASC ISSC	Airborne Strategic Communications Systems, E-6, TC-18, CFM56
PMA-272	EWS ISSC	Tactical Aircraft Electronic Warfare Systems, ASPJ, IDECM, ALR-67, AAR-47, ALE-29, ALE-39, ALE-47
PMA-273	T-45 ISSC	T-45 TS, T-6, F405
	T-6 ISSC	T-6
PMA-275	V-22 ISSC	V-22, T406 (AE1107C)
PMA-276	H-1 ISSC	AH-1/UH-1, T400, T700
PMA-280	TOMAHAWK ISSC	Tomahawk Cruise Missile
PMA-281	CM ISSC	Cruise Missiles
	CMCC ISSC	Cruise Missile Command and Control Systems
PMA-282	WCS ISSC	Tactical Weapons Control Systems
PMA-290	P-3 ISSC	Maritime Surveillance Aircraft. P-3, EP-3, T56
	S-3 ISSC	S-3, ES-3, TF34
	ARS ISSC	Aerial Refueling Systems
PMA-299	MMH ISSC	Multi-Mission Helicopters. H-60, SH-2G
PMS-210	AMCM ISSC	Airborne Mine Countermeasures
Various Programs	TM ISSC	Technical Publications
	BAT ISSC	Aircraft Batteries
	APU ISSC	APU, Auxiliary Power Units, GTC, GTCF
	ATS ISSC	Air Turbine Starter (ATS), Ram Air Turbine, Starters, Cooling Turbines, Valves/Regulators, Heat Exchangers
	PROP ISSC	Propellers
	XMSN ISSC	Gearbox Bearings, Transmissions

**Figure 10.9-5: R} Partial Listing of In-Service Support Centers (Equipment Supported)**

### 10.13.1 Introduction

10.13.1.1 The Corrosion Prevention and Control Program establishes policy, responsibilities, and requirements to minimize corrosion damage to aircraft, engines, components, and SE, and provides direction for emergency reclamation.

#### 10.13.1.2 References:

- a. OPNAVINST 5100.19, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat.
- b. OPNAVINST 5100.23, Navy Occupational Safety and Health (NAVOSH) Program Manual.
- c. D}
- d. OPNAVINST 8000.16, The Naval Ordnance Maintenance Management Program (NOMMP).
- e. NAVAIR 01-1A-509-1, Cleaning and Corrosion Control, Volume I, Corrosion Program and Corrosion Theory.
- f. NAVAIR 15-01-500, Preservation of Naval Aircraft.
- g. NAVAIR 17-1-125, Support Equipment Cleaning, Preservation and Corrosion Control.
- h. DODINST 6050.5, DOD Hazardous Communications Program.
- i. MIL-STD-2161B(AS), Paint Schemes and Exterior Markings for U.S. Navy and U.S. Marine Corps Aircraft.
- j. OPNAVINST 3750.6, Naval Aviation Safety Program.
- k. NAVAIR 00-80T-121, Chemical and Biological Defense NATOPS Manual.
- l. FM 3-5/MCWP 3-37.3, Army Field Manual/Marine Corps Warfighting Publication, NBC Decontamination.
- m. A} NAVAIR 01-1A-509-2, Cleaning and Corrosion Control, Volume II (Aircraft).
- n. A} NAVAIR 01-1A-509-3, Cleaning and Corrosion Control, Volume III (Avionics and Electronics).

### 10.13.2 Discussion

10.13.2.1 This program applies to all Navy and Marine Corps activities, and commercial and other government activities performing contract maintenance, production, D-level, or other support functions on naval aircraft and SE. All activities shall place special emphasis on the importance of the Corrosion Prevention and Control Program and lend full support to ensure that corrosion prevention/control receives a priority for timely accomplishment, along with other required maintenance. To prevent aircraft mishaps, excessive out-of-service time, serious damage to aircraft and equipment, and a resultant reduction in readiness with increased cost, corrosion must be discovered and corrected by each level of maintenance in the very earliest stages of development. To accomplish this, responsibilities are assigned to all departments in each activity to ensure that sufficient expertise is available to perform all required inspections. Discovering and correcting corrosion in the earliest stages of development will prevent flight related mishaps, excessive out-of-service time, serious damage to aircraft and equipment, and reduction in readiness.

- a. When a damaged aircraft is determined to be beyond rework, the aircraft shall be reported as a category one strike per [Chapter 5](#). In this case, the aircraft may be transferred to the nearest CONUS naval air activity for return to COMNAVAIRSYSCOM for custody and final disposition.
- b. When it is impractical to return the aircraft to COMNAVAIRSYSCOM FS custody, the reporting custodian shall physically transport the aircraft to the supporting supply activity designated by the ACC/TY-COM. The stricken aircraft will be reported to COMNAVAIRSYSCOM for processing per current instructions for the SARDIP. No one, other than the IMA reclamation team, is allowed access to stricken aircraft.
- c. Request for stricken aircraft/components/assemblies will be directed to CO of the salvaging activity, marked "Attention Supply Officer."

#### 10.13.5.5 Salt Water Immersion/Fire Fighting Chemicals.

10.13.5.5.1 FRC activities shall publish and maintain a facility instruction outlining processing procedures for reclaiming salt water or chemical damaged equipment, work center personnel assignments/duties, team personnel training program, and required materials and equipment.

10.13.5.5.2 During reclamation actions, FRC activities will assist supported activities by providing expertise and equipment not authorized for O-level maintenance.

#### 10.13.6 Training; O-Level, I-Level, and R} D-Level Activities

10.13.6.1 O-level and I-level personnel engaged in aircraft, engine, component, or SE maintenance shall complete one R} or more of the following corrosion control training courses:

- a. CENNAVNTECHTRA Basic Corrosion Control Course (Course CNATT-BCC-2.0) or Avionics Corrosion Course (CNATT-ACC-2.0) available at <https://www.nko.navy.mil>.
- b. CENNAVNTECHTRA Corrosion Control (Basic) course (Course C-600-3180) D}\_\_\_\_\_.
- c. R} Aircraft Corrosion Control course (Course N-701-0013) or CENNAVNTECHTRA Aircraft Corrosion course (Course C-600-3183).
- d. R} Aviation Professional Apprentice Career Track (C-950-0011).

**NOTES: 1. Maintainers completing Aviation "A" School between April 1992 and October 2005 received corrosion control training equivalent to those listed in subparagraph 10.13.6.1a.**

**2. The training noted in subparagraphs 10.13.6.1a or 10.13.6.1b are prerequisite courses which must be satisfied prior to attending R} Aircraft Corrosion Control course (Course N-701-0013) or Aircraft Corrosion course (Course C-600-3183).**

10.13.6.2 O-level Work Center 12C or Corrosion Control Team personnel as well as the I-level Work Centers 51B, 60A, and 92D supervisors shall complete the Aircraft Corrosion Control course (Course N-701-0013) or Aircraft Corrosion course (Course C-600-3183) within 60 days of assignment.

**NOTE: The corrosion training noted in subparagraph 10.13.6.2 is a prerequisite for Aircraft Paint/Finish Course (Course C-600-3182) or Aircraft Paint Touch Up and Markings Course (Course N-701-0014).**

10.13.6.3 Personnel performing Aircraft and SE Painting operations (subparagraphs 10.13.4.1 and 10.13.4.2) shall complete the Aircraft Paint Touch Up and Markings course (Course N-701-0014) or Aircraft Paint/Finish course (Course C-600-3182) prior to painting aircraft/SE. This qualification is valid for an unlimited period.

**NOTE:** Activities may request on-site training for both Corrosion Control and Paint Final Finish from NATEC or FRC Mobile Training Teams via ACC/TYCOM. FRC Mobile Training Teams can provide Aircraft Corrosion Control course (Course N-701-0013)/Aircraft Paint Touch-up and Markings course (Course N-701-0014) training. NATEC can provide the Aircraft Corrosion Control course (Course N-701-0013) or Aircraft Corrosion course (Course C-600-3183)/Paint/Finish course (Course N-701-0014/C-600-3182) but must be granted written permission from the course manager from the respective course. FRC and NATEC representatives providing formal course support are required to be qualified instructors and subject matter experts. Setup, facilities, materials, publications, attendance and other considerations become the requesting unit's responsibility.

10.13.6.4 O-level QARs shall complete the Aircraft Corrosion Control course (Course N-701-0013) or Aircraft Corrosion course (Course C-600-3183) within 60 days of designation, if not previously completed. At a minimum, I-level AM (Navy) and Marine Corps structures mechanics (MOS 6062/6092) shall complete one or both of the above courses within 60 days of designation, if not previously completed.

10.13.6.5 Wing Material Condition Inspectors shall complete annual inspection OJT with FRC PMI representatives to include general inspection techniques, common discrepancy issues and current specific areas of interest being observed by the FRC/ISSC/TYCOM team.

10.13.6.6 Wing Material Condition Inspectors shall complete the Aircraft Corrosion Control course (Course N-701-0013) or Aircraft Corrosion course (Course C-600-3183) within 90 days of assignment.

**NOTES:** 1. Subparagraphs 10.13.6.4 through 10.13.6.6 (above) may be waived by the T/M/S Wing for operational commitments but must be satisfied within 90 days after completion of that operational commitment.

2. Course information for all NAVAIR and CENNAVAVNTECHTRA courses is available on CANTRAC at <https://cetarsweb.cnet.navy.mil>.

10.13.6.7 D-level artisans performing corrosion inspections, prevention, **R** abatement, and treatment shall complete locally prepared corrosion prevention and control and aircraft painting courses for qualification in corrosion control:

**NOTES:** 1. Maximum use of the FRC corrosion control training Aircraft Corrosion Control Course (N-701- 0013) is recommended for all personnel involved in aircraft/equipment maintenance.

2. Civilian contractor maintenance personnel that have attended OEM or equivalent training have met the intent of this requirement.

## **10.20 Individual Component Repair List (ICRL) Program (NAMPSOP)**

### **10.20.1 Introduction**

10.20.1.1 The ICRL Program establishes policy, responsibilities, and requirements for local repair capabilities of the IMA.

10.20.1.2 Reference. NAVSUP Publication 719, Guide for the Assignment, Application and Use of Source, Maintenance and Recoverability Codes.

### **10.20.2 Discussion**

10.20.2.1 The ICRL is a management tool which provides an IMA with the ability to relate its maintenance capability to individual items. The ICRL indicates if local repair capability exists for components inducted into the AMSU for repair, check, or test and identifies the work center with that capability. An ICRL shall have, as its focus, a listing of aircraft components supported by the IMA. End items should not be listed in an activity's ICRL. Work centers that only perform inspections, such as 530, and work centers that only repair end items, such as 731 and 910, would not normally have an ICRL. The ICRL provides:

a. Logic in NTCSS Optimized IMA NALCOMIS for expeditious induction of components for repair, or expeditious turnaround of components in AMSU back to supply for repair and return to FRCs and shore AIMD/MALS.

b. AMSU contingency operations in the event of NALCOMIS system failure.

c. A standard format to compare repair capability with other ICRLs.

10.20.2.2 All letters of designation, qualification, certification, course completion, medical certification, and completed maintenance related PQS shall be filed in the individual's qualification/certification record.

10.20.2.3 The COMNAVAIRFOR combined web-based ICRL is available for download from [R} COMNAVAIRFOR's web portal](#).

### **10.20.3 Responsibilities**

10.20.3.1 The MO shall:

a. Establish and maintain an effective ICRL Program.

b. Develop local command procedures (as required) per [Appendix D](#).

10.20.3.2 The Supply Officer shall:

a. Assist the MO in maintaining a viable ICRL Program.

b. Assist the MO in developing local command procedures.

c. Assign, in writing, a Supply ICRL Program Representative.

10.20.3.3 The MMCO shall:

a. Establish procedures to monitor component repair capabilities per this instruction.

b. Designate, in writing via the MMP/SME listing, an ICRL Program Manager.

- c. Ensure all CCs assigned to components are accurate.

10.20.3.4 The Program Manager shall:

**NOTE:** Upon designation as Program Manager, a self-audit shall be performed within 30 days and annually thereafter using the CSEC. The most current self-audit shall be retained within the program binder.

- a. Be responsible to the MMCO for the proper maintenance and use of the ICRL.
- b. Conduct training for all ICRL Petty Officers.
- c. Conduct quarterly ICRL review/training as follows:
  - (1) Request two ICRL reports, by work center code, from the DBA and issue to work centers.
  - (2) Assign a due date for work centers to complete their reviews.
  - (3) Direct work centers to annotate changes on both copies and forward one copy back to the ICRL Program Manager by the assigned due date. The other copy will be retained by the work center as the working copy.
  - (4) Verify SM&R codes, P/Ns, COGs, and NSNs using FEDLOG and web sites such as NAVICP (<https://www.navsup.navy.mil/navsup>), NALDA (<http://www.navair.navy.mil/logistics>), and WEBFLIS (<https://www.webflis.dlis.dla.mil>).
  - (5) After incorporating all valid changes, request new printouts and distribute copies to Production Control/AMSU and the Supply ICRL Program Representative. Distribute new copies to specific work centers upon request.
  - (6) Ensure all X2 CC requests are routed to the IMRL Manager or TCP Coordinator to obtain required equipment or tools, and all X6 CC requests are routed to the CTPL to obtain required technical data.
  - (7) Ensure all X3 CC requests are routed to the MMCO and AMO.
- d. Verify all recommended ICRL Changes.

**NOTE:** Ensure no SM&R code changes are made to the ICRL until official notification is received from NAVICP or COMNAVAIRSYSCOM.

- e. Retain all ICRL Change Requests (Figure 10.20-2) and other pertinent data on file until all changes have been incorporated.
- f. Ensure all ICRL Change Requests (Figure 10.20-2) are routed to applicable personnel.
- g. Validate CCs X2, X3 and X6, TCCDT quarterly. Refer to ICRL Capability Codes (Figure 10.20-4) for CC description and required actions.
- h. Process the ICRL Error Mailbox. As AMSU inducts components into the AIMD/MALS, various data elements from the MAF/WO are validated against the activity's ICRL. The W/C, WUC, TEC, CAGE and P/N blocks from the MAF/WO should agree with what is listed on an activity's ICRL. When these data elements do not agree, and the item is inducted into the work center, an ICRL Error Mailbox is created for the ICRL Manager. In many cases, the ICRL is correct and the MAF/WO is wrong, in this case the ICRL Error message can simply be deleted. When review of the ICRL Error message indicates the ICRL is incorrect, a new entry can easily be added to the ICRL. Review of this mailbox by the ICRL Manager normally provides training opportunities for work center and AMSU personnel.
- i. Use the COMNAVAIRFOR provided Combined ICRL (**R** on [COMNAVAIRFOR's web portal](#)) to:



### ICRL CAPABILITY CODES

**C1** - Full Repair. This code identifies items for which a normal range of failures can be completely repaired by the I-level activity per applicable directives, for example, Maintenance Plan; Source, Maintenance, and Recoverability (SM&R) codes; and Maintenance Instruction Manuals (MIMs).

**C3** - Limited Repair. This code identifies items for which repair of the normal range of failures cannot be accomplished. However, repair to some extent beyond test and Ready For Issue (RFI) certification is performed.

**A1** - Check and Test Only. This code identifies items which can be tested for range of common failures but cannot be repaired at the activity.

**M1** - Assemble/Manufacture. This code identifies material which can be assembled or fabricated by the I-level activity.

**R1** - Repair and Return to Originating Activity. This code identifies components that are automatically and routinely sent from one shore I-level activity to another shore I-level activity for repair and return. The R1 capability code is NOT to be used in an afloat IMA's ICRL. This code can only be used with Work Center 05A.

**X1** - Repair Not Authorized. This code indicates the activity is not authorized to repair the component. This code is equivalent to BCM 1 and indicates that the I-level activity is not authorized to repair the component. X1 may not be used for field level repairable equipment and can only be used with Work Center 05A.

**X2** - Lack of Authorized Equipment/Tools/Facilities. This code indicates authorized equipment, tools, or facilities are not available. This code must always be accompanied by a Target Capability Code (TCC) and a Target Capability Code Date (TCCDT).

**X3** - Lack of Required Technical Skills. This code indicates required skills are not available. This code must always be accompanied with a TCC and a TCCDT.

**X6** - Lack of Technical Data. This code indicates repair cannot be accomplished due to lack of maintenance manuals, drawings, test program disk/tape, test program instruction, etc., which describe detailed repair procedures and requirements. This code must always be accompanied by a TCC and a TCCDT.

**Z1** - Consumable Material. This code identifies material assigned SM&R code with ZZ in the fourth and fifth positions or B in the fourth position for which a repair program has not been planned but a capability exists to repair a limited range of failures, or for which the I-level activity is capable of performing a servicing function, for example, flushing or cleaning.

**D1** - Full D-Level Capability. This code identifies items for which the full range of failures can be completely repaired, reworked, or overhauled. This code signifies an activity as being a DRP.

**D3** - Partial D-Level Capability.

**Figure 10.20-3: R ICRL Capability Codes**

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### 11.3.6 Maintenance Plans

11.3.6.1 Maintenance plans are concise descriptions of maintenance requirements that drive all logistics elements. These plans must be developed and complied with for designated aircraft, their related systems, and other selected items of equipment. It is COMNAVAIRSYSCOM policy to develop, issue, and maintain maintenance plans for the systems and equipment of aircraft, airborne weapons, targets, armament, training equipment, ALSS, air traffic control equipment, and SE.

11.3.6.2 The maintenance plan establishes and delineates the repairable components and maintenance requirements of a selected system or item of equipment. For each repairable component, the maintenance plan identifies the maintenance level authorized to perform the maintenance action indicated and estimates the frequency of component failure or repair action. The maintenance plan provides the interface between maintenance, engineering, and supply for provisioning purposes and communicates necessary, but complete, inputs to enable other logistic element managers to develop their hardware support requirements. The maintenance plan is designed as a tool for ILS planning and is prepared using NAVAIRINST 4790.22. Maintenance plans and all revisions are approved and issued by the designated APML/LM for the end item system or equipment. Changes to maintenance plans are issued when problems, design changes, or operational experience indicate a change is required. Where one or more of the required logistic support elements are not applicable, concurrent with equipment or systems introduction to fleet use, an interim maintenance plan is developed and issued as an attachment to the maintenance plan. This interim plan is rescinded by the cognizant APML/LM when full support is available.

### 11.3.7 Standards System Support

11.3.7.1 Standards must be established prior to organizational or procedural development.

11.3.7.1.1 Unit material condition standards are established by the CNO and set forth in the MESM **R** (provided on [COMNAVAIRFOR's web portal](#)). These standards are achieved by designing maximum reliability into the system, organizing an acceptable support capability, and providing timely feedback information so that existing procedures can be updated as required to accomplish established objectives of unit and system material condition.

11.3.7.1.2 Reliability standards are established as a contractual responsibility of the manufacturer of any system, subsystem, or component. Every effort is made at all levels of maintenance to ensure the reliability that has been designed into a weapon or weapon system is maintained while it is in operational status. The NAMDRP is used to ensure continuity of this effort.

11.3.7.1.3 Complete support capability standards are met by the optimum organization of personnel, training, facilities, material, SE, and engineering support into a properly functioning system of planned maintenance. This standard can be reached only with the utmost effort and complete cooperation by all maintenance personnel and activities.

11.3.7.2 Feedback from the MDS must provide information to all management levels to permit decisions based on adequate analyses. The process of accurately gathering data and providing feedback is a critical element in making the Defense Acquisition System and more importantly the acquisition and improvement of Naval aeronautical weapon systems work properly.

**CHAPTER 13**  
**Naval Aviation Logistics Command Management Information System**  
**(NALCOMIS) and Naval Tactical Command Support System (NTCSS)**  
**Optimized Organizational Maintenance Activity (OMA)**  
**NALCOMIS Data Collection System Center (NDCSC)**

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13.2.7.2 Stability and Control of Codes. Codes contained in this instruction are for Navy-wide use and may not be altered locally. COMNAVAIRFOR (N422G), controls the codes used in NTCSS Optimized OMA NALCOMIS, with the exception of aircraft status codes ([Appendix E](#)), TMR codes (OPNAVINST 3710.7), EOC codes (MESM **R**) (provided on [COMNAVAIRFOR's web portal](#)), and WUCs. WUCs are controlled by NATEC under COMNAVAIRSYSCOM cognizance. Requests for additions, changes, or deletions to these codes can be sent to cnaf.av3m@navy.mil.

13.2.7.3 SMART Aircraft Codes. These codes, normally known as usage parameters, are generated and controlled by COMNAVAIRSYSCOM PMAs for downloading from an MU to NTCSS Optimized OMA NALCOMIS.

### 13.2.8 Maintenance Information System (MIS) Queries and Reports

The aircraft VED is the starting point for all aircraft maintenance related reports/queries. This screen is displayed when users are in the maintenance module within the NTCSS Optimized OMA NALCOMIS application.

#### 13.2.8.1 Active Work Order Query

13.2.8.1.1 The Active Work Order Query will display a list of all WOs retrieved against an aircraft, SE, ALSS, MME, or uninstalled equipment item selected from a VED window. WOs listed on this window have MCNs and JCNs assigned, with the exception of the ORG, the user can clear the fields and select criteria to retrieve specific WOs. The user may select WOs to view; update; order material; assign aircraft, SE, ALSS, or MME items for cannibalization authority; or complete.

13.2.8.1.2 The following VED entries are color-coded to easily identify status:

- a. Red - NMC.
- b. Blue - PMC.
- c. Black - FMC.

**NOTE:** OMA-UG/Online Help provides additional information.

#### 13.2.8.2 Historical Work Order Query

Historical WOs are completed maintenance actions that are part of the history files. They enable the user to enter criteria and view details on selected historical WOs.

**NOTE:** OMA-UG/Online Help provides additional information.

#### 13.2.8.3 Aircraft Daily Status Report

13.2.8.3.1 Selecting the Aircraft Daily Status Report enables the user to generate reports containing data on each BUNO assigned to the organization. The date defaults to the current date to ensure that users are viewing or generating the current data. The dates can be modified to view the number of flight hours and number of sorties completed during a specified date range.

13.2.8.3.2 This report displays data on the current status of aircraft assigned to the activity. It contains the dates of last flights, total outstanding NMC/PMC WOs with their status, assigned work centers, and material requisitions (with assigned DDSNs).

Worker Hours. Enter last name of worker and tool box assigned to the task. Upon return to the work center the CDI/Supervisor/QA shall conduct a sight inventory of the tool container(s) and verify Tool Control Program requirements have been complied with. If no tools are required enter NTR. Start date/time - enter the beginning of the worker start date/time. Day (DD) Month (MMM) Year (YYYY) Time (TTTT) and end date/time - enter the end date time of the worker end task Day (DD) Month (MMM) Year (YYYY) Time (TTTT). CDI/Supervisor/QA BLOCK initials are entered here.

**NOTES:**

- 1. A worker can not be in work on more than one WO at a time.**
- 2. CDIs may account for man-hours expended while performing on equipment inspections. If no tools were used to perform inspection, the CDI will enter CDISUP in the toolbox block. CDI initials are not required. Work center supervisors may also account for man-hour expenditure involving research and ordering parts, using the same procedures as above.**

Current Job Status – Displays the current job status of the WO in the following format: status, date, time, and EOC code.

Inspection SCIR Impact. If an inspection is initiated in an Up status and then reaches its maximum allowable deviation (drop dead date), the NALCOMIS system has an auto-down program which will automatically change the status of the inspection WOs to a Down status. Until such time as Maintenance Control decides to SCIR Impact the inspection by selecting the SCIR Impacted Insp option from the Aircraft VED, the aircraft inspection WOs will not have an EOC displayed. Once SCIR Impacted, an EOC of “Y” is placed on the Control WO, and an EOC of “Z” is placed on the Look Phase WOs. This action cannot be reversed. The EOC Start Date/Time field will be displayed on the Job Status/Worker Hours screen with the date/time of when the SCIR Impact option was initiated and display the EOC of “Z”. This field will be used to start the SCIR clock, and the MAINT-1, MAINT-2, and MAINT-3 reports will calculate the aircraft readiness using this field.

Work Center. Defaults to the work center of the initiator, but is modifiable. If needed, select from the drop down the applicable work center the discrepancy is assigned to ([Appendix E](#)).

WUC/UNS. Select or enter the WUC/UNS that identifies the system, subsystem, or component on which work is being performed.

### **13.2.12 Aircraft Inventory Reporting System (AIRS)**

CM ALS and DBAs will read and become familiar with the contents of this section, [Chapter 5](#), and the MESM **R** (provided on [COMNAVAIRFOR's web portal](#)). Inventory accountability is accomplished through XRAY reporting in the CM module. XRAY date/time will reflect 1 minute later than transfer date/time.

#### **13.2.12.1 Subsystem Capability and Impact Reporting (SCIR) System**

The SCIR System is used to monitor mission capability of selected systems/subsystems. SCIR will be documented on the WO concurrently with the maintenance action that caused the reduction of the equipment's mission capability. This system provides managers with the degree of mission impairment, the length of time the equipment's capability was reduced, the system/subsystem that caused mission impairment, and maintenance/supply impact on equipment capability.

#### **13.2.12.2 Equipment Operational Capability (EOC) Codes**

13.2.12.2.1 An EOC code is a one alpha-character code designed to describe the severity level of SCIR maintenance actions. The EOC code is linked to the WUC in the CM baseline. EOC is prefilled based on the U/P/D indicator and WUC selection. Only one EOC can be documented on a WO. When required, the EOC is documented on the Single Work Center Inspection WO or the Look Phase WOs for inspections requiring more than one work center.

13.2.17.1.1 Type WO codes:

- a. IC - PDM or IMC/P Control.
- b. IF - PDM or IMC/P Fix Phase.
- c. IL - PDM or IMC/P Look Phase.
- d. MC - SDLM (MCI/ASPA) Control.
- e. MF - SDLM (MCI/ASPA) Fix Phase.
- f. ML - SDLM (MCI/ASPA) Look Phase.
- g. MX - SDLM (MCI/ASPA) Single Work Center.

13.2.17.1.2 Rework performed on aircraft (on-site and off-site) by naval aircraft industrial establishments, contractor's plants, and such other industrial organizations designated by COMNAVAIRSYSCOM will be documented using control, look, and fix phase documents.

13.2.17.1.3 Communication between the FRC and the squadron is crucial since the squadron is responsible for all aircraft readiness status changes for the FRC.

13.2.17.1.3.1 FRC activities will notify the reporting custodian upon arrival of the aircraft to be inducted into rework. At that time, the squadron will initiate the rework control document.

13.2.17.1.3.2 When the FRC activity is ready to change the status of the aircraft, the FRC will notify the squadron, which will complete the control document to terminate the aircraft standard rework status.

13.2.17.1.4 WUC assigned to PDM or IMC/P are sequential 030IMC1, 030IMC2, etc. WUC assigned to SDLM (MCI/ASPA) is 030SDLM.

**NOTES: 1. I-level personnel will comply with O-level QA, tool control, and documentation requirements.**

**2. Look phase documents are not issued for D-level.**

**3. The rework process encompasses the look phase only.**

13.2.17.1.5 Fix phase documents will be issued for repair of discrepancies discovered during the on-site standard rework process. Off-site repair actions are not recorded.

13.2.17.1.5.1 O-level (level 1) discrepancies will be completed by the squadron:

a. Work Center: To provide accurate man-hour accounting by rate, corrective maintenance actions shall be documented against the host work center whenever practical (110, 120, etc.).

b. EOC codes: C through L and Z (MESM **R**) (provided on [COMNAVAIRFOR's web portal](#))).

13.2.17.1.5.2 I-level (level 2) discrepancies will be completed using the Work Request.

13.2.17.1.5.3 D-level (level 3) discrepancies will be accomplished by an FRC activity using assist work center procedures. If, in the repair process, a repairable is required the repairable will be ordered on the O-level primary WO.

13.2.17.2 In Service Repair:

**CHAPTER 14**  
**Introduction to the Maintenance Data System (MDS), MDS Reports,**  
**and MDS Analysis**

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- d. How the malfunction, discrepancy, or failure occurred, when it was discovered, and the action taken to correct it.
- e. Identification of parts and components removed and replaced.
- f. Cause and duration of work stoppages.
- g. Man-hours and EMT expended on the job.
- h. Signatures of individuals performing, inspecting, and supervising the maintenance.
- i. TD identification and compliance.

14.1.3.2.2 Subsystem Capability and Impact Reporting. SCIR is generated from the MAF/WO. The SCIR reports which include the equipment's utilization use the Naval Aircraft Flight Record as the primary source of data. SCIR provides factual information, generated at the lowest level of maintenance, as to aircraft or equipment inventory and actual subsystem performance. It provides specific aircraft or equipment mission capability and uniquely defines the categories of FMC, PMC, and NMC for a specific type and model aircraft or equipment. The degradation of equipment mission capability is reported by recording EOC codes in the Repair Cycle and Maintenance/Supply Record sections of the MAF/WO. EOC codes are documented when a specific system or subsystem impacts the mission capability of that equipment. The EOC code is a three position code. The first position is derived from the MESM **R**} (provided on [COMNAVAIRFOR's web portal](#)). Only the first position is documented on the MAF/WO. The second and third positions are computer generated using the first two positions of the documented WUC. SCIR provides data to determine mission capability, system or subsystem reliability, and serves as a management tool. SCIR data may be used at any level of management.

**NOTE: Procedures for reporting SE inventory are defined in [Chapter 16](#).**

14.1.3.2.3 Material Reporting. Repairable component control and usage data are submitted to the NDCSC by the local supply organization using 60 series data from the daily extract and material requisitions (DD 1348) as source documents. Machine reports produced from these documents merge key data elements of maintenance and supply and are provided to the local supply (and IMAs/FRCs if requested) for monitoring the flow of repairable components. The information permits management to:

- a. Relate material issues/turn-ins to weapon systems and components by activities and maintenance level.
- b. Advise higher commands of material expenditures in support of maintenance.
- c. Determine weapon systems expenses at the O-level and I-level.

14.1.3.2.4 Utilization Reporting. Utilization of aircraft is reported by submission of Naval Aircraft Flight Records (OPNAV 3710/4). NAVFLIRS is completed by the pilot in command or aircraft mission commander upon termination of a simulator training/flight, an aircraft flight, series of flights or cancellation of a flight. This form also allows for documenting aircrew (officer and enlisted gain, loss, and revision).

#### **14.1.4 Central Design Activity (CDA) and NALCOMIS Functional Manager**

14.1.4.1 SPAWARSYSCEN Norfolk, VA, as the CDA, is responsible for generating source and object programs and QA testing of programs prior to fleet release. Programs and operating instructions, tailored to the capabilities of the individual hardware suites, are issued to the NDCSC, squadrons, FRCs, and AIMDs. [Figure 14-2](#), Program Responsibilities Flow Chart, shows these relationships.

alphanumeric. Codes in which the letters or numbers are arranged in a systematic, orderly pattern, conforming to the organizational pattern of the information to be encoded, are referred to as structured codes. Structured codes have been prescribed for much of the data to be processed by ships and stations for local use.

14.1.14.3 Codes Used in This System. Existing codes already available, either within the Navy or in other services, have been adopted and used in this system (as applicable). Some codes prescribed, such as work center codes, have been given limited structuring and have the flexibility of allowing for additional structuring to meet local management needs. Additional codes used in combination with other information form identifiers for control and other purposes. For example, a combination of the organization code, the Julian date, and a nonsignificant locally assigned sequence number is used in the system to generate a JCN. A list of the various codes peculiar to this system is shown in [Figure 14-8](#).

14.1.14.4 WUC Manuals/IETMS. To make certain that codes are conveniently available to all personnel actually performing and recording maintenance actions, WUCs have been published in manual form under COMNAVAIRSYSCOM technical publication system. In addition to WUCs applicable to individual weapon systems, the manuals contain listings of other codes used in maintenance documentation. The NATEC web site (<https://mynatec.navair.navy.mil>) provides instructions on obtaining WUC manuals. Current listings of codes, other than WUCs, are in [Appendix E](#).

14.1.14.5 Stability and Control of Codes. The codes contained herein are for Navy-wide use and may not be altered locally. COMNAVAIRFOR (N422G) controls the codes used in this system, with the exception of aircraft status codes, TMR codes, WUCs, and EOC codes. Aircraft status codes are listed in this instruction ([Appendix E](#)), TMR codes are listed in OPNAVINST 3710.7, and EOC codes are listed in the MESM **R** (provided on [COMNAVAIRFOR's web portal](#)). WUCs are controlled by NATEC (Code 6.8.5) under COMNAVAIRSYSCOM cognizance. Requests for additions, changes, or deletions to these codes can be sent to: [cnaf.av3m@navy.mil](mailto:cnaf.av3m@navy.mil).

#### **14.1.15 Document Control Form (OPNAV 4790/45)**

14.1.15.1 Activities using R-Supply and NALCOMIS do not need to use the MR document control form. Activities submitting source documents via electronic media shall use locally developed procedures for tracking document submission. The aviation 3M System will automatically generate a Document Control Form (DCF) ([Figure 14-4](#)) and return it to the originating activity via e-mail from the NDCSC.

14.1.15.2 The documents to be submitted are separated, grouped, and counted by document type. The number of documents submitted by type is entered in the appropriate line under forms count column 1. The NDCSC will enter Julian date and time received, signature, and verify the number of documents by entering their count of the document category in Forms Count column 2.

14.1.15.3 NAVFLIRS source documents must be batched and submitted on separate DCFs from other MDS source documents.

14.1.15.4 If, during NDCSC processing, a document is found to be illegible or otherwise cannot be entered, it is returned to the submitting activity for correction. A total of these rejected documents is entered in the DCF forms reject column. Rejected or late documents submitted after the end of an accounting period must be submitted with a separate DCF. This data will be processed with the next accounting period data. Any such submission requires special coordination with the NDCSC, and an away code of Z will be assigned to the DCF.

14.1.15.5 To identify data generated in an away from home situation, a one character code may be entered by the submitting activity in the away from home space at the top of the DCF. Any alphabetic or numeric character may be used except 1, 2, 3, 4 or Z. Z is reserved for late submission from the previous accounting period, and codes 1 and 2 are reserved for making corrections to the COMNAVAIRSYSCOM (AIR-6.8.4)

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CODE	NO. OF CHAR	ALPHA NUMERIC OR ALPHA/ NUMERIC	SOURCE DOCUMENTS USED ON	WHERE LISTED	RESPONSIBLE FOR ASSIGNMENT AND CONTROL
Action Taken Code	1	A/N	MAF/WO	Appendix E WUC Manual	COMNAVAIRFOR (N422G)
Technical Directive Code	2	N	MAF/WO	Appendix E	COMNAVAIRFOR (N422G)
Malfunction Description Code	3	A/N	MAF/WO	Appendix E WUC Manual	COMNAVAIRFOR (N422G)
Organization Code	3	A/N	All	Appendix E	COMNAVAIRFOR (N422G)
Permanent Unit Code	6	N	MAF/WO	OPNAV Notice	CNO
System Code	2	N	MAF/WO DD 1348	WUC Notice	NATEC
TD Status Code	1	A	MAF/WO	Appendix E	COMNAVAIRFOR (N422G)
Type Equipment Code	4	A/N	All	Appendix E	COMNAVAIRFOR (N422G)
Type Maintenance Code	1	A/N	MAF/WO	Appendix E WUC Manual	COMNAVAIRFOR (N422G)
When Discovered Code	1	A	MAF/WO	Appendix E WUC Manual	COMNAVAIRFOR (N422G)
Work Center Code	3	A/N	MAF/WO	Appendix E	COMNAVAIRFOR (N422G)
Work Unit Code	1, 3, 5, or 7, 8 thru 32	A/N	MAF/WO DD 1348	Appendix E WUC Manual	NATEC
Time/Cycle Prefix Code	1	A	MAF/WO	Appendix E	COMNAVAIRFOR N422G)
AWM Reason Code	1	N	MAF/WO	Appendix E WUC Manual	COMNAVAIRFOR N422G)
Transaction Code	2	N	MAF/WO	Appendix E WUC Manual	COMNAVAIRFOR (N422G)
Total Mission Requirement	3	A/N	Naval Aircraft Flight Record	OPNAVINST 3710.7	CNO
Inventory Code	1	A/N	MAF/WO	Appendix E	COMNAVAIRFOR (N422G)
Position Sensitive Indicator	2	A/N	MAF/WO	WUC Manual	NATEC
EOC Code	3 (NOTE 1)	A/N	MAF/WO	MESM (NOTE 2)	CNO

- NOTES:** 1. The first character (alpha) is recorded on the MAF/WO. The second and third characters (numeric) are computer generated from the WUC documented on the MAF/WO.  
2. T/M/S MESMs are **R}** provided on [COMNAVAIRFOR's web portal](#).

**Figure 14-8: Consolidated Code List**

**CHAPTER 15**  
**Organizational Level (O-Level) Maintenance Data System (MDS) Functions, Responsibilities,**  
**and Source Document Procedures**

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**2. For subcustody SE in the custody of another department that requires repair by the AIMD/IMA/FRC the JCN will be assigned by the AIMD/IMA/FRC Production Control, reflecting the AIMD organization code.**

A19 WORK CENTER. Enter the code of the work center performing the maintenance action described on the MAF. Work center codes are listed in [Appendix E](#).

UP or DOWN Arrow. Annotate as appropriate to indicate end item status.

MODEX. For local use. If operating NALCOMIS OMA, enter side number of aircraft or leave blank for SE.

PRI. Used by I-level to assign workload priorities.

TURN-IN DOCUMENT. Enter the Julian date and requisition document number on which the specific item was ordered from the Failed/Required Material blocks 45 and 49, to assist in local supply control. If operating NALCOMIS OMA, turn-in document is automatically assigned.

SYSTEM/REASON. Enter short description of the discrepancy.

MCN. The MCN is a seven-character alpha/numeric code assigned by the system. It serves as a base for MDR and reference for retrieving maintenance data and for Maintenance Control procedures. The MCN is used in NALCOMIS while querying the database and tracking the MAF through the maintenance process.

## **15.2.2 Aircraft Inventory and Readiness Reporting System (AIRRS)**

Maintenance Control personnel will read and become familiar with the contents of this section, [Chapter 5](#), and OPNAVINST 3710.7.

### **15.2.2.1 Definition of Terms**

15.2.2.1.1 This system provides the reporting custodian with a list of assets on hand and a ready reference of which aircraft require SCIR. All aircraft (Navy/Marine Corps) listed in the MESM **R** ([provided on COMNAVAIRFOR's web portal](#)) require SCIR reporting.

15.2.2.1.2 The following terms are used throughout this section in describing how to document inventory transactions:

- a. ACC. The activity responsible for fleet distribution and management of assets.
- b. Reporting Custodian. The activity having primary custody of the aircraft. The reporting custodian is responsible for maintenance and readiness reporting on the aircraft.
- c. Equipment Master Roster (E-00) E-00. A listing, by reporting custodian, of all assets on hand that require SCIR or inventory reporting. The E-00 is updated and published monthly by the NDCSC. The E-00 will be kept current by Maintenance Control to reflect inventory and status changes that occurred during the reporting period.
- d. Inventory Codes. Define the reporting requirements and current status of aircraft in the inventory reporting system. Inventory codes are in [Appendix E](#).

(1) "IN" Material Condition Reporting Status (MCRS) (Inventory Code A). An aircraft is in the inventory reporting system and requires SCIR documentation. "IN" MCRS is the normal status of an aircraft.

(2) "OUT" Material Condition Reporting Status (Inventory Codes 1-4). An aircraft is in the inventory reporting system but does not require SCIR documentation.

**NOTE:** See [Chapter 5](#) for status codes requiring "IN or OUT" of MCRS.

e. TRCODEs. Inventory transactions are described in [Appendix E](#).

(1) Inventory Gain (TRCODE 00). An inventory gain ([paragraph 15.2.11.1](#)) is the receipt of an aircraft into inventory reporting by a reporting custodian. Aircraft will be gained in any inventory status.

(2) Inventory Loss (TRCODE 03). An inventory loss ([paragraph 15.2.11.2](#)) occurs when a reporting custodian transfers an aircraft or strikes it from naval service. An inventory loss is documented only if the aircraft has previously been gained and is in the inventory system. Aircraft may be lost in any currently assigned inventory status.

(3) Change of MCRS (TRCODE 02). A change of MCRS "OUT" and "IN" ([paragraph 15.2.11.3](#)) that does not involve a change of reporting custodian.

#### **15.2.2.2 Inventory Reporting Transaction**

15.2.2.2.1 Inventory reporting transactions enable aircraft inventory control at both the FLEMATSUPPO and COMNAVAIRSYSCOM (AIR-6.8.4) and are necessary inputs to the monthly report of summary data.

15.2.2.2.2 A MAF will be prepared for each reportable incident of inventory change by all reporting custodians.

15.2.2.2.2.1 An aircraft inventory MAF is required when an aircraft:

- a. Is gained (received into unit reporting custody).
- b. Is lost from unit reporting custody (transfer or strike).
- c. Changes either IN or OUT of MCRS.

15.2.2.2.2.2 The submission of SCIR inventory data does not relieve the unit of responsibility for timely OPNAV XRAY report submission per [Chapter 5](#).

15.2.2.2.2.3 A} To ensure accurate SCIR reporting, all outstanding SCIR related maintenance actions must be changed to reflect EOC Code A whenever inventory transactions result in a change of MCRS status to "OUT".

#### **15.2.2.2.3 SCIR Related Maintenance Action Close Out**

15.2.2.2.3.1 If an aircraft is lost because of transfer or strike, all outstanding SCIR related maintenance actions, as well as non-SCIR maintenance actions with accumulated man-hours, must be closed out at the time of transfer or strike and processed through the NDCSC. For transfer aircraft, all outstanding maintenance actions will be reinitiated by the receiving activity, using the Julian date and time as recorded on the aircraft inventory gain MAF. If operating NALCOMIS and transferring an aircraft to another NALCOMIS OMA site, ensure all data stored on electronic media is transferred with the aircraft.

15.2.2.2.3.2 R} If an aircraft is placed in an "OUT" of MCRS status as a result of mishap or other reason, all outstanding SCIR related maintenance action must be changed to reflect EOC Code A. This action shall occur at the time of the change in MCRS for maintenance action in an M or S job status. The use of this special code indicates an aircraft is out of reporting status and does not reflect that aircraft's capability. The

AWM time must not be accounted for during the period any equipment is out of service or during the period equipment is reported in EOC Code A. Any SCIR related maintenance actions with valid EOC code hours must be closed out at the end of the current reporting period even if EOC Code A at the end of the period. At the time of close out, reinitiating of all SCIR related maintenance action will be necessary for the forthcoming period using code A. No further close out of those documents will be required provided no valid EOC code hours are documented during subsequent reporting periods.

15.2.2.2.3.3 When a change of MCRS occurs, the manner in which material requirements are reported or generated must also change.

15.2.2.2.3.3.1 When an aircraft in an "IN" status, with NMCS or PMCS requirements outstanding, changes to an "OUT" status, the project codes of the requirements will be modified to 730. The requisition serial number (G series) and the priority will remain the same.

15.2.2.2.3.3.2 When an aircraft is in an "OUT" status and a NMCS or PMCS requirement is subsequently discovered, then it will be requisitioned with a G series serial number, a 730 project code, and the appropriate priority designator based on the unit's FAD. When the aircraft is returned to an "IN" status, any outstanding 730 requirements will be modified back to the appropriate NMCS or PMCS project code.

15.2.2.2.3.3.3 Aircraft that are in an "IN" status, with anticipated NMCS or high-time requirements outstanding and change to an "OUT" status will make no change to these requisitions. However, aircraft in an "OUT" status will not generate new anticipated NMCS or high-time requirements until returning to an "IN" status.

15.2.2.2.3.3.4 Forwarding Completed MAFs. Reporting custodians supported by a NDCSC will send inventory MAFs to QA for forwarding to the NDCSC not later than 0900 on the first working day following the transaction. Non-NDCSC supported LAMPS, VERTREP, and search and rescue detachments will forward inventory MAFs to the parent squadron. If during the operation at the NDCSC a document is found to be incomplete or illegible, it will be returned to the submitting activity for completion or correction. The questionable data elements will be circled in red by the NDCSC.

15.2.2.2.3.3.5 SCIR Inventory Reporting Corrections. Methods for correction of erroneous inventory transactions have been established. They are as follows:

a. For the correction of PUC (aircraft only), inventory code, and METER (SE only), corrections are made on the DAR using audit report correction procedures.

b. For corrections to the action organization, TRCODE, TEC, BU/SERNO, time, and date, an entire new transaction must be submitted and the erroneous transaction deleted.

c. If, as a result of previous error or omission, the inventory change is not reflected on the new month's E-00 report, two distinct and separate actions are required to correct both the local and up-line databases.

(1) Local database: Submit an inventory change MAF using the first day of the current month and 0002 as the date and time of change. For example: your activity received (gained) aircraft BUNO 123456 in September, but through error or omission, the inventory gain was not processed and was not discovered until verification of the E-00 report for October. An inventory gain transaction must be submitted using the date of 1 October and the time of 0002.

(2) Up-line database: Submit the inventory gain as a late document (Away Code Z) using the original date and time of the transaction.

**NOTE: Away Code Z documents do not correct the local database.**



### 15.2.3 Subsystem Capability and Impact Reporting (SCIR) System

The SCIR system is used to monitor mission capability of selected systems/subsystems. SCIR will be documented on the MAF concurrently with the maintenance action that caused the reduction of the equipment's mission capability. This system will provide managers with the degree of mission impairment, the length of time the equipment's capability was reduced, the system/subsystem that caused mission impairment, and maintenance/supply impact on equipment capability.

#### 15.2.3.1 Equipment Operational Capability (EOC) Codes

15.2.3.1.1 An EOC code is a structured, three-character code which relates a particular system or subsystem within a given model/type of equipment to a mission capability of that equipment. First position of the EOC code is an alpha character which describes mission capability; last two positions are numeric characters which identify system/subsystem (first two-characters of the WUC) causing mission capability impairment.

15.2.3.1.2 Each T/M/S aircraft under SCIR system has an EOC code list, called a MESM. MESMs are [R](#) provided on [COMNAVAIRFOR's web portal](#).

15.2.3.1.2.1 The alpha character of the EOC code is documented in the EOC column of repair cycle and Maintenance/Supply Record sections of the MAF.

15.2.3.1.2.2 Numeric characters of the EOC code (second and third positions) are computer generated using the following rules:

- a. [D](#).
- b. If the first position of the EOC code is in a range of C-H, J-L, or W-Z, and the first two positions of the WUC are in a range of 11-99, the computer will generate the second and third positions of the EOC code from the first two positions of the WUC.
- c. If the first position of the EOC code is Z, and the first two positions of the WUC are 03 or 04, the computer will generate the second and third positions of the EOC code from the first two positions of the WUC.

#### 15.2.3.2 Mission Capability

Maintenance actions impacting mission capability of the end item are considered to be SCIR related. Mission capability is impacted whenever a system or subsystem listed in the MESM cannot be used for its intended function. Sometimes only the function is listed in the MESM. A subsystem is considered non-functional even though the final disposition may be no defect (A-799). Sometimes a discrepancy report will imply the subsystem is functional but troubleshooting proves it was not. In these cases, mission capability is considered to be impacted from the time the discrepancy was reported.

#### 15.2.3.3 Subsystem Capability and Impact Reporting System (SCIR) Application

15.2.3.3.1 SCIR is applicable to all on-equipment work on end items having a MESM and is documented by the work center performing the maintenance action whenever mission capability is impacted. When SCIR is not applicable, do not enter an EOC code.

15.2.3.3.2 SCIR is applicable when mission capability is impaired while:

**CHAPTER 16**  
**Intermediate Level (I-Level) Maintenance Data System (MDS) Functions,**  
**Responsibilities, and Source Document Procedures**

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end item TD compliance also accounts for man-hours and EMT expended removing and reinstalling the component. A separate TD compliance MAF is required for each component removed.

16.2.2.5.3 [Figure 16-37](#) shows the types of MAFs used to document TDs that apply only to a component, for example, a gear box or test set module. When an RFI component is removed for off-equipment inspection or modification in compliance with a component TD, a TD compliance supporting MAF is generated to account for man-hours and EMT expended removing and reinstalling the component. A separate MAF with a different JCN is required for each component removed, and a TD compliance turn-in document is generated ([Figure 16-33](#)).

16.2.2.5.4 [Figure 16-38](#) shows the types of MAFs used when a failed component is removed as part of an end item TD. The end item TD compliance MAF accounts for the man-hours and EMT expended removing and replacing the component.

16.2.2.5.5 [Figure 16-39](#) shows the types of MAFs used when a failed component is removed in conjunction with a component TD. The on-equipment repair action MAF accounts for the man-hours and EMT expended removing and replacing the component. Two turn-in documents are required; one to initiate the TD compliance action, and one to initiate the repair action. If the component was originally removed on a TD compliance facilitate MAF, the TD facilitate MAF is converted into a repair action MAF by identifying the removed component in the removed/old item section, changing the AT code to R, and ordering a replacement component. Documentation then continues in the normal manner of a repair MAF per [paragraph 16.2.2.2](#).

#### **16.2.2.6 Support Equipment (SE) Inventory Reporting Procedures**

16.2.2.6.1 The SE inventory reporting system provides the SE reporting custodian with a list of major assets on hand. SE may be inventoried using an inventory code of 0. These reporting system requirements are in addition to the AMMRL Program and do not negate the reporting requirements published in NAVAIRINST 13650.1.

16.2.2.6.2 Definition of Terms. The following terms are used throughout this section in describing how to document inventory transactions.

16.2.2.6.2.1 Controlling Custodian. SECAs are responsible for fleet distribution and management of SE assets.

16.2.2.6.2.2 Reporting Custodian. Reporting custodian is the activity (usually I-level) having primary custody of the SE as indicated on the IMRL.

16.2.2.6.2.3 Equipment Master Roster (E-00). The E-00 is a serialized listing, by reporting custodian, of all assets on hand. The E-00 will be updated and published monthly. The E-00 will be kept current by Production Control to reflect those inventory and status changes that have occurred during the reporting period. Refer to [Chapter 14](#) for a complete description of this report, its uses, and correction procedures.

##### **16.2.2.6.2.4 Inventory Codes**

16.2.2.6.2.4.1 Inventory status codes define the reporting requirements and current status of SE in the inventory reporting system. Inventory codes are listed in [Appendix E](#).

16.2.2.6.2.4.2 Utilization Reportable. All equipment listed in MESM **R**} (provided on [COMNAVAIRFOR's web portal](#)) require utilization reporting. Inventory Code 0 applies to training devices and missile targets that are inventoried but for which no mission capability data is collected.

16.2.2.6.2.5 Transaction Codes. Inventory transactions are described by the transaction codes in [Appendix E](#).

## CHAPTER 17

### Aircraft Material Condition Readiness

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17.1.5.6 Each hour calculation will be carried to three decimal places with no rounding. All hour accumulations will be rounded and printed to the nearest whole hour.

17.1.5.7 Each percentage calculation will be carried to three decimal places with no rounding. All percentage accumulations will be rounded and printed to the nearest tenth.

17.1.5.8 All AWM hours, by reason code, will be applied to the first valid EOC encountered in a maintenance record/event.

17.1.5.9  $AWM_d$  is the accumulated sum of all documented AWM hours with Reason Code 1-8 within one record.

17.1.5.10  $AWM_c$  is the result of  $AWM_t - AWM_d$ .

17.1.5.11 GL is the elapsed time between received date/time (Blocks B08 and B12) and the completed date/time (Blocks B30 and B34) for one record.

17.1.5.12 GLs is the accumulation of elapsed time for each SCIR related event with valid EOC code and job status of M or S within one record.

17.1.5.13 When the first SCIR related EOC code does not meet the criteria for NMCMS:

$$AWM_t = GL_s - EMT - \text{Supply}$$

17.1.5.14 When the first SCIR related EOC code meets the criteria for NMCMS:

$$AWM_t = AWM_d. \text{ (There will be no } AWM_c \text{ generated.)}$$

17.1.5.15 When position 2 and 3 of EOC is 03 and TM is E or S and the first SCIR related EOC code meets the criteria for NMCMU:

$$AWM_t = AWM_d \text{ (There will be no } AWM_c \text{ generated.)}$$

## 17.2 Mission-Essential Subsystems Matrices (MESMs)

### 17.2.1 Aircraft Readiness

17.2.1.1 The CNO established 73 percent MC and 56 percent FMC as the overall NAE aircraft material readiness goal. A MESM states specific T/M/S MC and FMC readiness goals. Overall NAE aircraft readiness is calculated as an average from specific T/M/S MC and FMC rates as reported by SCIR documentation through MAF EOCs as measured against a MESM **R** (provided on [COMNAVAIRFOR's web portal](#)).

17.2.1.2 A MESM is considered essential for performing specific missions, achieving required material condition readiness, maintenance standards, supply system effectiveness, and the safety requirements of OPNAVINST 3710.7.

### 17.2.2 Mission Readiness

17.2.2.1 A MESM lists subsystems required for specific missions and the impact of subsystem degradation or inoperability through EOCs. EOCs shall be documented only when the described subsystem, capability, function, or mode impacts the specific mission (Chapter 15). In some instances, impact to specific missions is identified at the system level rather than by exact subsystem. The capability to perform specific missions is possible when all subsystems, capabilities, functions, and modes are operable.

**D}**

**DETACHMENT** - A temporary reporting custodian with aircraft assigned from a parent squadron or unit. Detachments are established when a squadron deploys one or more aircraft to a ship or base substantially removed from the location of the parent organization; the parent squadron CO feels that it would be impractical to retain reporting custody of the aircraft so deployed. Detachments have the same responsibilities, with respect to the requirements of this instruction, as all other reporting custodians of aircraft.

**DEVIATION** - To depart from established policy or procedures, such as deviation from the NAMP. A specific written authorization granted prior to the manufacture of an item to depart from a particular performance or design requirement of a specification, drawing, or other document for a specific number of units or a specific period of time. A deviation differs from an engineering change in that an approved engineering change requires corresponding revision of the documentation defining the affected item, whereas a deviation does not contemplate revision of the applicable specification or drawing.

**DFAS - DEFENSE FINANCE AND ACCOUNTING SERVICE** - The activity designated to perform operating budget accounting for the Commanders in Chief, U. S. Atlantic and Pacific Fleets and respective TYCOMs, including associated accounting and reporting for ships, staffs, designated shore activities, aviation squadrons, mobile construction battalions, and miscellaneous units and commands, as assigned. Operating force units and commands transmit unfilled orders to the designated fleet accounting office and receive special listings for review, validation, and adjustment of operational target records.

**DIFM - DUE IN FROM MAINTENANCE**

**DIFMS - DEFENSE INDUSTRIAL FINANCIAL MANAGEMENT SYSTEM**

**DIRECT MAINTENANCE** - That effort expended by maintenance personnel in the actual performance of maintenance on aircraft, aeronautical equipment, or SE per the applicable technical manual. It applies equally to both contractor and GFE.

**DIRECTED REMOVAL** - A requirement to remove an item after a fixed period of operation because there is insufficient confidence regarding continued operation and because failure during operation would have serious consequences.

**DIRECTIVE** - A military communication in which a policy is established, a specific action is ordered, or a plan is put in effect.

**DISCD - DISCOVERED**

**DIVERSION** - The removal of an item of government furnished material or contractor furnished material positioned at a contractor's plant incidental to a production contract.

**DLA - DEFENSE LOGISTICS AGENCY**

**D-LEVEL - DEPOT LEVEL**

**DLQP - DEPOT LEVEL QUALITY PROGRAM**

**DLR - DEPOT LEVEL REPAIRABLE**

**DM-BPM - DEPOT MAINTENANCE-BUSINESS PROCESS MODEL**

**DMDS - DEPOT MAINTENANCE DATA SYSTEM**

**DMI - DEPOT MAINTENANCE INTERSERVICE or DIRECT MATERIAL INVENTORY**

**DMISA - DEPOT MAINTENANCE INTERSERVICE SUPPORT AGREEMENT**

a whole. Material inventory management includes cataloging directions, requirements computation, procurement direction, distribution management, disposal direction, and general rebuild direction.

ICRL - INDIVIDUAL COMPONENT REPAIR LIST (A) ICRL is provided on COMNAVAIRFOR's web portal (<https://www.portal.navy.mil/comnavairfor/N42/N422/AFAST/CmbIcrl/default.aspx>)

IETM - INTERACTIVE ELECTRONIC TECHNICAL MANUAL

IH - INDUSTRIAL HYGIENIST

I-LEVEL - INTERMEDIATE LEVEL

I-LEVEL CALIBRATION ACTIVITY - A Navy activity, other than a Navy calibration or standards laboratory, authorized by the TYCOM and COMNAVAIRSYSCOM to perform calibration.

ILS - INTEGRATED LOGISTIC SUPPORT - A composite of all the support considerations necessary to ensure the effective and economical support of a system for its life cycle. It is an integral part of all other aspects of system acquisition and operation. ILS is characterized by harmony and coherence among all the logistic elements.

ILS MANAGER - The individual responsible for (1) defining and executing an integrated support program for a weapon system or equipment acquisition; (2) interpreting the operational concept of weapon systems and equipment for the purpose of establishing ILS concepts, requirements, parameters, and constraints for inclusion in appropriate basic planning documents, requests for proposal, contracts, and ALSPs; and (3) accomplishing logistic support actions directly or assigning responsibilities for accomplishment to individual element managers within or external to the organization.

IMA - INTERMEDIATE MAINTENANCE ACTIVITY - An aviation activity (ship or station), including MALS, authorized to provide I-level maintenance support. It consists of the aircraft maintenance, supply, and weapons departments/divisions. The I-level maintenance mission is to enhance and sustain the combat readiness and mission capability of supported activities by providing quality and timely material support at the nearest location with the lowest practical resource expenditure.

IMACS - INTERSERVICE MATERIAL ACCOUNTING AND CONTROL SYSTEM

IMC/P - INTEGRATED MAINTENANCE CONCEPT/PLAN - IMC/P replaced ASPA/SDLM and PACE/MCAPP for a specific T/M/S aircraft. This scheduled D-level maintenance emphasizes a FID and may segregate the OSP into smaller periods of POI and PMI. Specific T/M/S aircraft transition from initial concept to an approved maintenance plan upon concept validation and approval.

IMI - INTERACTIVE MULTIMEDIA INSTRUCTION - IMI applies to predominantly interactive, electronically delivered training and training support products. IMI products include all instructional software, content, graphics and software management tools used to support instructional programs (MIL-HDBK-29612-3A).

IMR - INDIVIDUAL MASTER ROSTER

IMRL - INDIVIDUAL MATERIAL READINESS LIST - A consolidated list shows items and quantities of certain SE required for material readiness of the aircraft ground activity to which the list applies. The lists are constructed by extracting those portions of SERMIS that pertain to the maintenance and material logistics responsibilities of the activity to which the list applies. See [AMMRL](#).

INACTIVE AIRCRAFT - NON-PROGRAM AND RESERVE STOCK AIRCRAFT.

INACTIVE TIME - That time during which an item is in the inactive inventory.

INC - INCORPORATED

INDUSTRIAL ESTABLISHMENT - Naval aeronautical production establishments, organized along industrial rather than military lines. These establishments are equipped to perform aircraft rework on a large scale and an extremely

JON - JOB ORDER NUMBER

JPCG - JOINT POLICY COORDINATING GROUP

JPCG-DMI - JOINT POLICY COORDINATING GROUP DEPOT MAINTENANCE INTERSERVICE (PROGRAM)

JQR - JOB QUALIFICATION REQUIREMENT

JRB - JOINT RESERVE BASE

JS - JOB STATUS

JSF - A} JOINT STRIKE FIGHTER

JTS - JET ENGINE TEST SYSTEM

JULIAN DATE - The year and numerical day of the year identified by four numeric characters. The first character indicates the year and the remaining three characters specify the day of the year, for example, 5210 indicates the 210th day of 1995 or 28 July 1995.

## K

KIN - KIT IDENTIFICATION NUMBER

KIT - See [PARTS KIT](#), [PARTS KIT CODES](#), and [QEC](#).

## L

LAMPS - LIGHT AIRBORNE MULTIPURPOSE SYSTEM (HELICOPTER)

LAMS - LOCAL ASSET MANAGEMENT SYSTEM - An automated MIS which provides standardized local management of IMRL assets through the use of bar code technology. It provides for an accurate wall to wall inventory, which can be accomplished by unit personnel, resulting in significant reductions of manpower expenditures and operational disruptions.

LAN - LOCAL AREA NETWORK

LANDING - The controlled return of an aircraft in flight to the surface. It includes touch and goes (carrier or field) providing the landing gear touches the surface. A bolter is an attempted arrested landing on a carrier in which the landing gear or hook touches the deck but the arresting gear is not engaged and the aircraft continues in flight.

LANT/PAC - ATLANTIC/PACIFIC

LCF - LOW CYCLE FATIGUE - A fatigue cracking failure mode that is defined by the frequency and characteristics of the loading that causes the crack. LCF is caused by stresses built up by mechanical/thermal cycles which occur only a few times per flight. The four most significant LCF events are: stop/start/stop cycles, rapid major changes in operating temperature, rapid major changes in rotational speed, and significant increases in aerodynamic loading of the blades/disks.

LCPO - LEADING CHIEF PETTY OFFICER

LEAD TIME - A composite of production, administrative (both contractor and government), spares positioning, and shipping time.

LEC - LOCAL ENGINEERING CHANGE

LECP - LOGISTICS ENGINEERING CHANGE PROPOSAL

LEM - LOGISTICS ELEMENT MANAGER

LES - LOCAL ENGINEERING SPECIFICATION(S)



LPD - LANDING PLATFORM DOCK

LPS - LOCAL PROCESS SPECIFICATION(S)

LRA - LAST REWORK ACTIVITY

LRCA - LOCAL REPAIR CYCLE ASSET - Any repairable item in an activity's OSI fixed allowance for which local repair capability exists.

LUI - LIFE USAGE INDEX

## M

M - MAINTENANCE (JOB STATUS)

MACG - MARINE AIR CONTROL GROUP

MACHINE RECORD - A collection of related data elements, in machine-sensible language, treated as a unit of information. In maintenance data collection, a machine record is a segment of magnetic tape.

### A} MACS - MARINE AIR CONTROL SQUADRON

MAF - MAINTENANCE ACTION FORM - A multi-purpose document used in the MDS and the VIDS.

MAG - MARINE AIRCRAFT GROUP

MAGNETIC PARTICLE - A method that uses magnetic fields for the purpose of detecting fine discontinuities at or near the surface of the part. This method is limited to ferromagnetic materials. See [NDI](#).

MAGTF - MARINE AIR GROUND TASK FORCE

MAINT/L - MAINTENANCE LEVEL

MAINTAINABILITY - The ability to maintain an item in, or restore to, a specific operational condition by expending resources, including man-hours, at an acceptable rate when using prescribed procedures and resources.

MAINTENANCE - The function of retaining material in, or restoring it to, a serviceable condition. Its phases include servicing, repair, modification, modernization, overhaul, rebuild, test, reclamation, inspection, condition determination, and the initial provisioning of support items. The term has a very general meaning, ranging from a matter of minutes of squadron servicing, to a matter of months of industrial activity rework; the provision of maintenance material itself is within the meaning. Maintenance should be qualified to convey a specific meaning. See [MAINTENANCE TYPES](#) for distinctions in the scope of maintenance.

MAINTENANCE (MATERIAL) - All actions taken to retain material in a serviceable condition or to restore it to serviceability. It includes inspection, testing, servicing, classification as to serviceability, repair, rebuilding, and reclamation.

MAINTENANCE ACTION - Any one of a number of types of specific maintenance operations necessary to retain an item in or restore it to a specified condition.

MAINTENANCE ACTIVITY - Any organization (activity or unit) of the naval establishment assigned the mission, task, or functional responsibility of performing aircraft upkeep or rework. Use of the term refers to organizations and personnel occupying aircraft maintenance facilities and using aircraft maintenance material, but does not include reference to the facilities or material themselves. Aircraft maintenance activities are classified as to levels of maintenance performed. The highest level a particular activity is responsible for performing is established as the activity's classification. This classification does not necessarily mean the activity involved is responsible for all lower levels of maintenance. See [AVIATION ACTIVITY](#).

MAINTENANCE ALLOCATION TABLE - Describes the function to be performed in the repair of gas turbine engines, identifying the degree of repair.

MAN-HOURS - The total number of accumulated direct labor hours (in hours and tenths) expended in performing a maintenance action. Direct maintenance man-hours are man-hours expended by assigned personnel to complete the work described on the source document. This includes the functions of preparation, inspection, disassembly, adjustment, fault correction, replacement or reassembly of parts, and calibration/tests required in restoring the item to a serviceable status. It also includes such associated tasks as checking out and returning tools, looking up part numbers in the IPB, transmitting required information to material control, and completing documentation of the MAF.

MAN-MOUNTED EQUIPMENT - Equipment used to provide overall protection and comfort to the aircrew under various flight, emergency, and environmental conditions.

MANUFACTURER - Individual, company, firm, corporation, or government activity engaged in the fabrication of finished or semifinished products.

MANUFACTURER CODE - See [CAGE](#).

MANUFACTURER PART NUMBER - See [REFERENCE NUMBER](#).

MAP/FMS - MILITARY ASSISTANCE PROGRAM/FOREIGN MILITARY SALES

MATCALs - MARINE AIR TRAFFIC CONTROL AND LANDING SYSTEMS - A} MATCALs is an all-weather, expeditionary terminal air traffic control system operated by the MATCD as part of the MACSs that provides tactical air traffic control services at forward operating bases, expeditionary, and existing airfields. MATCALs provides all-weather air traffic control services using radar, and precision approaches, tower services, and navigational aids.

MATCD - MARINE AIR TRAFFIC CONTROL DETACHMENT

MATCHED SET - A group of two or more separate components that function together in a single system and are normally removed, repaired, checked, adjusted, calibrated, and installed together. Replacement of a single component of a matched system normally requires check/adjustment/calibration of the matched set.

MATERIAL - All items necessary for the equipment, maintenance, and support of military activities without distinction as to their application for administrative or combat purposes, excluding ships or naval aircraft.

MATERIAL CONDITION - Reporting status with respect to SCIR. See [MC](#), [FMC](#), [PMC](#), and [NMC](#).

MATERIAL CONTROL - See [INVENTORY CONTROL](#).

MATERIAL CONTROL REGISTER - A register established to record all requisitions for material passed to the Supply Support Center.

MATERIAL MANAGEMENT - See [INVENTORY CONTROL](#).

MATERIAL REQUIREMENTS - Those quantities of items of equipment and supplies necessary to equip, provide a material pipeline, and sustain a service, formation, organization, or unit in the fulfillment of its purpose or task during a specified period.

MATMEP - MAINTENANCE TRAINING MANAGEMENT AND EVALUATION PROGRAM

MAW - MARINE AIRCRAFT WING

MC - METER CODE

MC - MISSION CAPABLE - Material condition of an aircraft that can perform at least one and potentially all of its missions. MC Hours = EIS Hours - NMC Hours.

MCAPP - MODIFICATION, CORROSION, AND PAINT PROGRAM

MCAS - MARINE CORPS AIR STATION

MCC - MATERIAL CONTROL CODE - A single alphabetic character assigned by the inventory manager to segregate items into more manageable groupings (fast, medium, or slow movers) or to relate to field activities special reporting/control requirements.

MCI - MATERIAL CONDITION INSPECTION

MCI - MATERIAL CONDITION INSPECTION - MCI replaces ASPA/SDLM for a specific T/M/S aircraft which have been designated by OPNAV N781 as nearing the end of their service life. These aircraft are no longer funded for standard rework. The purpose of MCI is not a PED adjustment, but to ensure airworthiness for an additional operational flying period specified by OPNAV.

MCN - MAINTENANCE ACTION FORM CONTROL NUMBER

MCO - MARINE CORPS ORDER

MCRC - MASTER COMPONENT REWORK CONTROL

MCRS - MATERIAL CONDITION REPORTING STATUS

MCS - MINE COUNTERMEASURES SHIP

MDA - MILESTONE DECISION AUTHORITY

MDBA/A - MAINTENANCE DATA BASE ADMINISTRATOR/ANALYST

MDPS - MAINTENANCE DATA PROCESSING SYSTEM

MDR - MASTER DATA RECORD OR MAINTENANCE DATA REPORT/REPORTING

MDS - MAINTENANCE DATA SYSTEM

MDU - MATERIAL DELIVERY UNIT

MEAN TIME BETWEEN FAILURES - The total functioning life of a population of an item divided by the total number of failures within the population during the measurement interval. The definition holds for time, cycles, miles, events or other measure of life units.

MEASURE - METROLOGY AUTOMATED SYSTEM FOR UNIFORM RECALL AND REPORTING - A metrology system for the recall and reporting of test equipment by means of MIS techniques, maintains records of calibration and automatically recalls items when due for calibration. See [CUSTOMER ACTIVITY](#), [FCA](#), [FORMATS](#), [METER CARD](#), and [SUBCUSTODIAN](#).

MER - MULTIPLE EJECTOR RACK

MESM - MISSION-ESSENTIAL SUBSYSTEMS MATRIX/MATRICES - A MESM states specific T/M/S MC and FMC readiness goals and subsystems required for specific missions and the impact of subsystem degradation or inoperability through EOCs. A} MESM is provided on COMNAVAIRFOR's web portal (<https://www.portal.navy.mil/comnavairfor/N42/N422/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fcomnavairfor%2fN42%2fN422%2fShared%20Documents%2fN422C%20NAMP&Folder>)

METBUL - METROLOGY BULLETIN

METCAL - METROLOGY AND CALIBRATION

METER - METROLOGY EQUIPMENT RECALL

METER CARD - METROLOGY EQUIPMENT RECALL CARD - Source document used to update the MEASURE. All actions to PME/TAMS are reported to MEASURE via METER Cards.

METER READING - Meter readings apply to only those items that have a clock/meter installed. Readings will be in time, cycles, or starts to the nearest whole number.

METRL - METROLOGY REQUIREMENTS LIST

SAD - SUPPLY ACCOUNTING DIVISION

SAFE - STRUCTURAL APPRAISAL OF FATIGUE EFFECTS

SAFE FOR FLIGHT - The material condition of an aircraft which, considering mission requirements and environmental conditions, permits it to be launched, flown and landed safely and ensures the aircrew has, as a minimum, the operable equipment for safe flight required by: NAVAIR 01 Series Manual, Aircraft NATOPS; OPNAVINST 3710.7, General NATOPS; and MESM **R** (provided on [COMNAVAIRFOR's web portal](#)), Subsystem Capability and Impact Reporting (Safely Flyable Column).

SAFE FOR FLIGHT CERTIFICATION - The decision process performed by authorized and designated personnel that certifies all W&B requirements have been satisfied, all applicable MRCs have been complied with (or a deviation has been attained from the appropriate authorities), all previously known discrepancies that precluded safe flight have been corrected, and all known discrepancies (evaluated separately and collectively) do not preclude safe flight.

SAFETY LEVEL OF SUPPLY - The quantity of material, in addition to the operating level of supply, required to be on hand to permit continuous operations in the event of minor interruption of normal replenishment or unpredictable fluctuations in demand.

SALTS - STREAMLINED AUTOMATED LOGISTICS TRANSMISSION SYSTEM

SALVAGE - The saving or rescuing of condemned, discarded, or abandoned property and of materials contained therein for reuse, refabrication, or scrapping.

SAMM - SYSTEM ADMINISTRATOR MAIN MENU

SAMPLE - One or more units of product drawn from a lot or batch selected at random without regard to their quality. The number of units of product in the sample is the sample size.

SAMPLING PLAN - A statement of statistically valid sample size or sizes to be used and the associated acceptance and rejection criteria.

SAR - SEARCH AND RESCUE

SARDIP - STRICKEN AIRCRAFT RECLAMATION AND DISPOSAL PROGRAM

SAT - SHORT AIRFIELD TAKEOFF

SB - SERVICE BULLETIN

SCC - SEQUENCE CONTROL CARD

SCDE - SUPPLY CHAIN DEPLOYMENT EXPERT

SCDTE - SUPPLY CHAIN DESIGN TECHNICAL EXPERT

SCH - SCHEDULING TIME

SCHEDULED MAINTENANCE - Periodic prescribed inspection/servicing of equipment done on a calendar, mileage, or hours of operation basis.

SCIR - SUBSYSTEM CAPABILITY IMPACT REPORTING - Material Condition Reporting Status of Aircraft.

SCREENING:

ADMINISTRATIVE SCREENING - The screening of all material received at the IMA for repair to determine if the item is within the check/test/repair capability of the IMA.

**COMNAVAIRFORINST 4790.2A CH-2**  
**10 Nov 2009**

OPNAVINST 2450.2	Electromagnetic Compatibility Program Within the Department of the Navy
OPNAVINST 3110.11T	Policies and Peacetime Planning Factors Governing the Use of Naval Aircraft
OPNAVINST 3120.32C	Standard Organization and Regulations of the U.S. Navy
OPNAVINST 3500.39B	Operational Risk Management
OPNAVINST 3500.34F	Personnel Qualification Standards (PQS) Program
OPNAVINST 3710.7T	NATOPS General Flight and Operating Instructions
OPNAVINST 3750.6R	Naval Aviation Safety Program
OPNAVINST 3960.16A	Navy Test, Measurement, and Diagnostic Equipment (TMDE) Automatic Test Systems (ATS), and Metrology and Calibration (METCAL)
OPNAVINST 4030.1A	Navy Packaging Program
OPNAVINST 4410.2A	Joint Regulation Governing the use and Application of Uniform Source Maintenance and Recoverability Codes
OPNAVINST 4440.25	Consolidated Remain-in-Place List (CRIPL) for Aviation Material
OPNAVINST 4441.12C	Retail Supply Support of Naval Activities and Operating Forces
OPNAVINST 4442.3C	Guidelines for Computing Spare Aircraft Engine and Engine Module Requirements
OPNAVINST 4614.1F	Uniform Materiel Movement and Issue Priority System (UMMIPS)
OPNAVINST 4731.1B	Joint Oil Analysis Program (JOAP)
OPNAVINST 4790.4E	Ships' Maintenance and Material Management (3-M) System Policy
OPNAVINST 4790.14A	Joint Depot Maintenance Program
OPNAVINST 4850.1C	Conventional Ordnance Assessment and Maintenance Requirements Policy
OPNAVINST 5090.1C	Environmental Readiness Program Manual
OPNAVINST 5100.8G	Navy Safety and Occupational Safety and Health Program
OPNAVINST 5100.19D	NAVOSH Program Manual for Forces Afloat
OPNAVINST 5100.23G	Navy Safety and Occupational Health (SOH) Program Manual
OPNAVINST 5100.27B	Navy Laser Hazards Control Program
OPNAVINST 5102.1D	Navy and Marine Corps Mishap and Safety Investigation, Reporting, and Record Keeping Manual
OPNAVINST 5218.7B	Navy Official Mail Management Instruction
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OPNAVINST 5513.1F	Department of the Navy Security Classification Guides
OPNAVINST 6470.3A	Navy Radiation Safety Committee
OPNAVINST 8000.16C	The Naval Ordnance Maintenance Management Program (NOMMP)
OPNAVINST 8020.14	Department of the Navy Explosives Safety Policy

**Naval Aviation Logistics Command Management Information System (NALCOMIS) Job Status Codes**

A1.	Pre-Induction Screening.	M6.	AWM Awaiting AIMD.
CC.	MAF Canceled.	M7.	AWM Flight/Operational.
CM.	Contractor Maintenance.	M8.	AWM Awaiting Other Shops.
CP.	Contractor Parts.	M9.	AWM Funding
DD.	Analyst Delete.	<u>A} CT.</u>	<u>AWM Cure Time (Adhesives, Sealant, Paint)</u>
IW.	In Work.	WB.	In Transit from AWP Locker.
JC.	Job Complete.	WD.	Awaiting Disposition.
M1.	AWM In Depot.	WP.	AWP In Shop.
M2.	AWM SE/Hangar.	WQ.	AWP In AWP Locker.
M3.	AWM Backlog.	WS.	AWP Work Stoppage.
M4.	AWM Off Shift.	WT.	In Transit to AWP Locker.
M5.	AWM Other.		

**A. STATUS CODE FOR USE WITH OPERATING AIRCRAFT**

ASSIGNED PRIMARY USE

IN OPERATING STATUS

1. Combat	A10
Combat Support	A20
Undergraduate Aircrew Training	A30
2. Reserve Aircrew Training	A40
FRS Aircrew Training	A60
Operational Test and Evaluation	A70
Logistic Support	A80
Advanced Aircrew Training (FITWEPCOL, NSWAC, TPS, Adversary, FTRG)	A90
Developmental Test and Evaluation	AJ0
Test Support Aircraft	AK0
Search and Rescue	AL0
Executive Transport	AM0
Flight Demonstration Squadron	AN0
Strategic Forces (TACAMO)	AS0
Other (Oceanographic/Antarctic Research)	AR0

**R} NOTE:** NASC FS reporting custodians will never report aircraft in their reporting custody in status codes A\_\_.

Only A\_\_ status codes are IN-MCRS. All others are OUT-MCRS.

For aircraft in-transit via surface/air oportune lift, use status codes KGK and KLK accordingly.  
Following XRAY sequence applies:

**KGK - Awaiting transport/undamaged/non-flyable, Ninety-six hours prior to scheduled lift, aircraft are permitted to be placed in KGK awaiting transport.**

**KLK - In transport (air or surface)/undamaged/non-flyable.**

**KGK - Post transport reassembly, not to exceed 96 hours upon arrival at final destination.**

**A\_0 - Back to operational or appropriate status.**

**B. STATUS CODES FOR DEPOT LEVEL MAINTENANCE (PIPELINE)**

**Rework**  
**Process**

**Enroute to Rework**

**Awaiting Rework**

**In**  
**Process**

By Flight/  
Airlift

By  
Surface

Flyable

Not  
Flyable

**STANDARD DEPOT LEVEL MAINTENANCE (STANDARD REWORK)**

SDLM	F10	FA0	E1_	EA_	D10
SDLM MOD	F20	FB0	E2_	EB_	D20
SDLM/CR DAM	F30	FC0	E3_	EC_	D30
IMC/P	F40	FD0	E4_	ED_	D4_
ACI/AWI	F50	FE0	E5_	EE_	D50